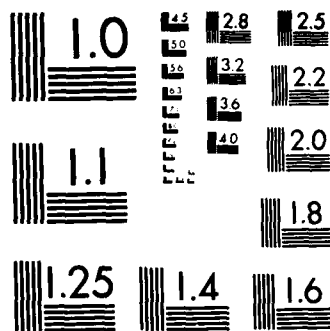


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VERSUCHSANSTALT FUER LUFT- UND RAUMF
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MICROCOPY RESOLUTION TEST CHART
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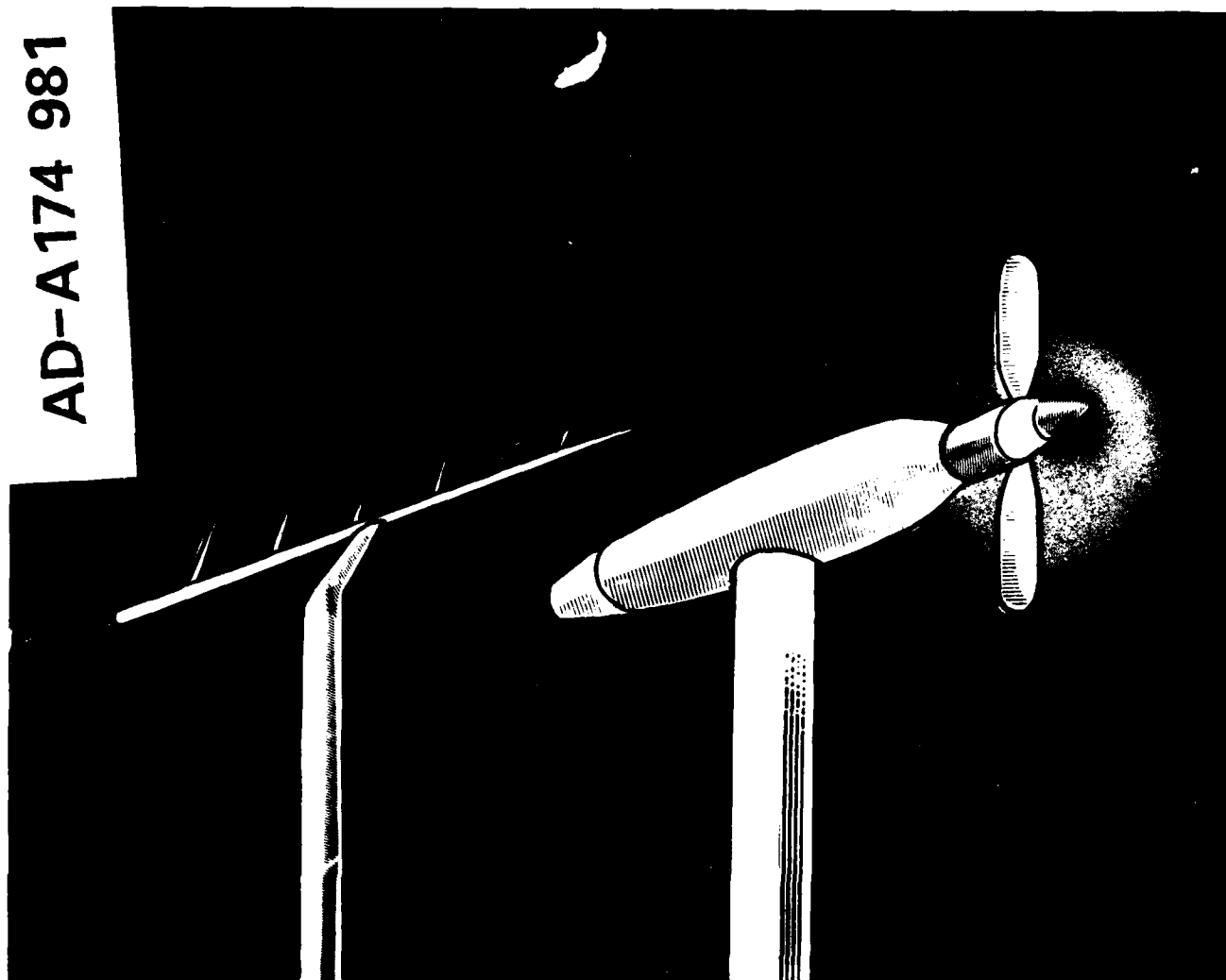
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DFVLR/FAA Propeller Noise Tests in the German-Dutch Wind Tunnel DNW

Appendix V: The Effect of Propeller Disc-plane Attitude
(Propeller 2: Thickness 8.5%, Square Tip-shape)

DFVLR-IB 129-86/3
FAA Report No. AEE 86-3

AD-A174 981



Jointly conducted by:



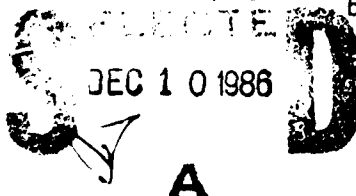
US Department
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Deutsche Forschungs-und
Versuchsanstalt für
Luft-und Raumfahrt e.V.

Inst. für Entwurfsaerodynamik
Abteilung Technische Akustik



by Werner M. Dobrzynski
Hanno H. Heller
John O. Powers
James E Densmore

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DATA REPORT ON PROPELLER NOISE TESTS
IN THE GERMAN-DUTCH WIND TUNNEL

APPENDIX V

TEST RESULTS ON THE EFFECT
OF PROPELLER DISC-PLANE ATTITUDE
(PROPELLER 2: THICKNESS 8.5%, SQUARE TIP-SHAPE)

by

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1. Introduction

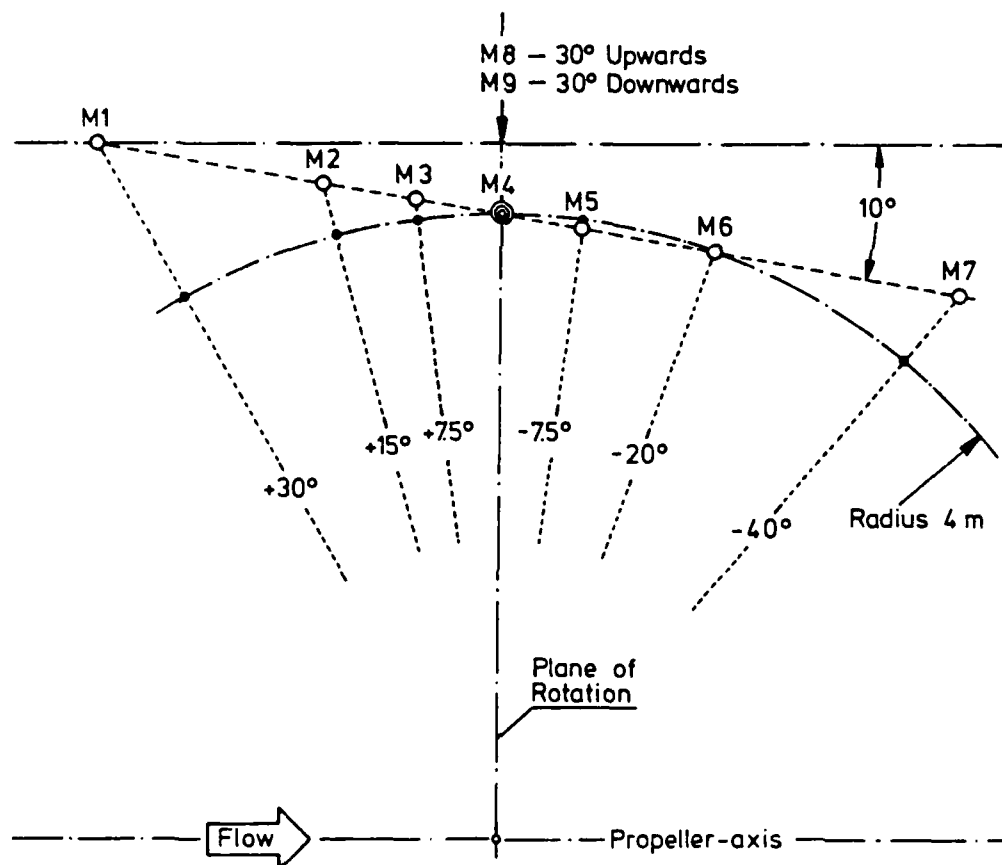
Within a joint effort (and supported by the German Ministry of Research and Technology/BMFT) between the Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt (DFVLR), the US Federal Aviation Administration (FAA), and the German Ministry of Transportation (BMV), propeller noise tests were conducted in the "Deutsch-Niederländischer Windkanal/German Dutch Wind Tunnel (DNW)" to develop high quality propeller-acoustics data, which could be used by manufacturers for acoustic design purposes, and by researchers to validate established or newly developed theoretical noise prediction methods.

Specifically, the program addressed propeller Mach-number and disc-plane attitude effects as related to noise certification test and evaluation procedures. Changes in Mach-number, as they affect acoustic data adjustments, were explored through independent variation of tunnel flow velocity, propeller rotational speed and ambient air temperature. The tests on the effect of in-flow angle on propeller noise also incorporated the influence of a typical engine nacelle on the flow field and, hence, on the propeller noise.

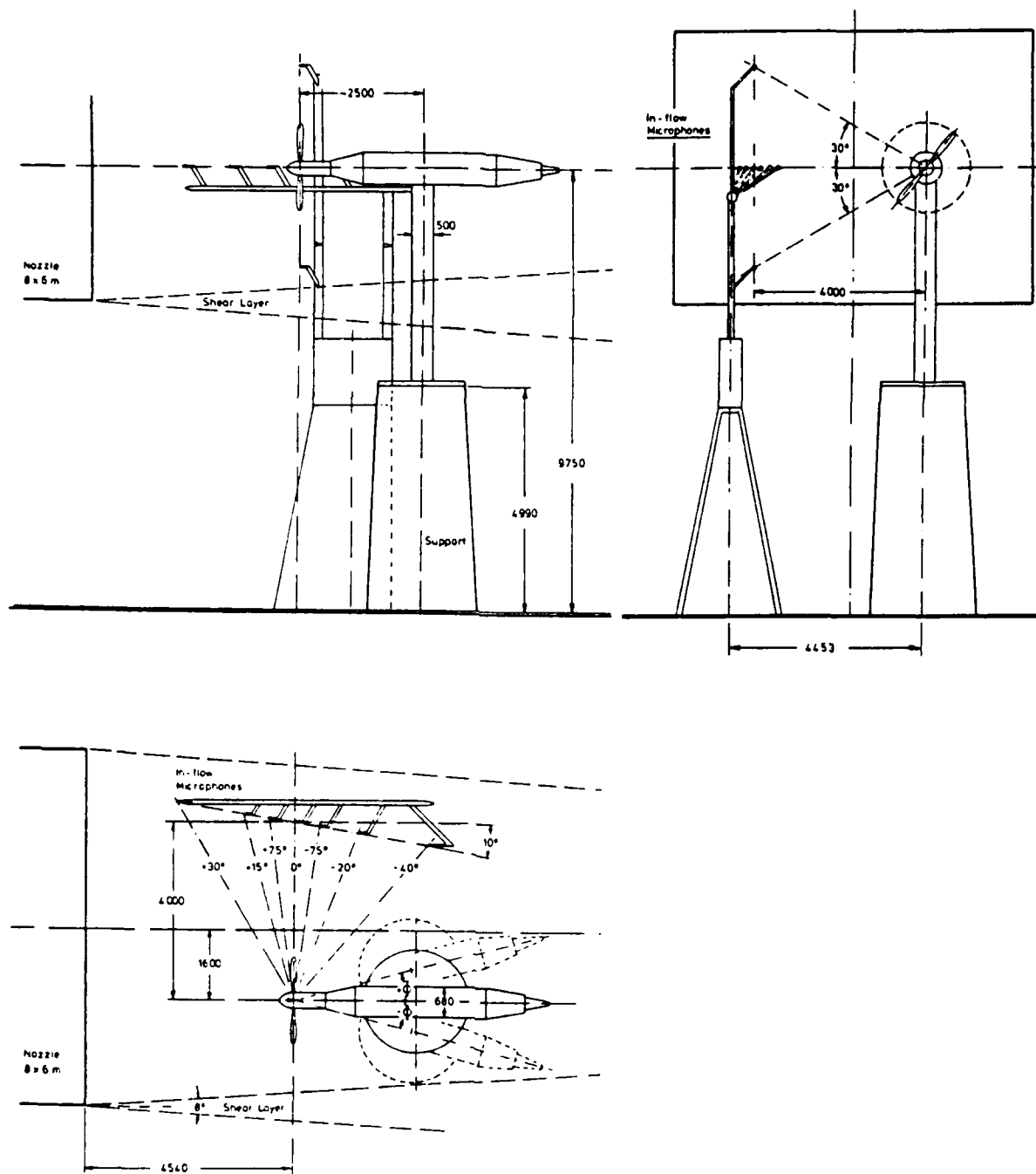
In this Appendix the test results on the effect of propeller disc-plane attitude (Propeller 2: Thickness 8.5%, square tip-shape) are documented in terms of pressure-time histories, narrow-band spectra and unweighted as well as A-weighted overall sound pressure levels, together with supplementary information necessary for further data interpretation. A detailed description of data-acquisition and -reduction techniques is provided by the "Executive Report" to this Appendix.

2. Microphone Array

A total of seven in-flow microphones were positioned in the horizontal plane at different streamwise locations corresponding to particular geometric radiation angles from the propeller center. Two additional microphones were positioned in the plane of rotation (4 m lateral distance to the propeller axis) at angles of ± 30 deg respectively above and below the horizontal plane with reference to the propeller center.



In-flow Microphone Positioning



Schematic Representation of Test-rig Arrangement within the Core-flow Regime of the DNW 8x6m² Open Test Section

3. Environmental and Operational Test-data

In the following table(s) the data-point matrix is documented. These table(s) summarise the as-measured data and characteristic propeller operational parameters as calculated from measured data.

RUN NO.	DATA POINT	PITCH ANGLE		ROT. SPEED	FLOW VEL.	POWER KW	THRUST NEWTON	ATTITUDE ANGLE		FLOW TEMP. KELVIN	FLOW PRES. PASCAL	FLOW DENS. KG/CM	ADV. RATIO	ATTACK ANGLE DEG	POWER COEF.	THRUST COEF.	HEL. MACHN.
		DEG	DEG	RPM	M/S	KW	NEWTON	DEG	DEG								
142	GC-1	20.7		2100.	51.8	100.0	1569.			287.0	100254.	1.214	0.2318	3.523	0.0554	0.0619	0.6753
143	GC-2	20.7		2400.	52.0	187.5	2819.		-7.4	287.6	100243.	1.212	0.2036	5.509	0.0698	0.0853	0.7664
144	GC-3	20.7		2700.	77.4	162.3	1603.		-7.4	288.2	100273.	1.209	0.2694	0.939	0.0425	0.0384	0.8741
145	GC-4	24.4		1800.	51.5	88.0	1402.		-7.4	286.7	100202.	1.215	0.2689	4.675	0.0774	0.0752	0.5842
146	GC-5	24.4		2100.	51.7	167.4	2520.		-7.4	287.2	100204.	1.213	0.2314	7.254	0.0929	0.0995	0.6750
147	GC-6	24.4		2400.	67.0	225.7	2712.		-7.4	288.1	100255.	1.209	0.2624	5.118	0.0842	0.0822	0.7758
139	LC-1	20.7		2100.	51.6	98.5	1559.		-3.8	286.3	100225.	1.217	0.2309	3.585	0.0545	0.0613	0.6760
140	LC-2	20.7		2400.	51.5	186.0	2810.		-3.8	286.6	100222.	1.216	0.2017	5.648	0.0690	0.0847	0.7675
141	LC-3	20.7		2700.	76.9	156.6	1525.		-3.8	287.7	100241.	1.211	0.2677	1.057	0.0410	0.0365	0.8745
136	LC-4	24.4		1800.	51.2	85.6	1368.		-3.8	286.7	100200.	1.215	0.2673	4.781	0.0753	0.0734	0.5840
137	LC-5	24.4		2100.	51.4	166.3	2491.		-3.8	287.0	100191.	1.214	0.2300	7.347	0.0923	0.0983	0.6750
138	LC-6	24.4		2400.	67.1	223.9	2643.		-3.8	287.4	100246.	1.213	0.2628	5.091	0.0833	0.0799	0.7768
73	BC-4	20.7		2100.	51.2	99.0	1579.		0.0	285.9	99124.	1.205	0.2292	3.710	0.0553	0.0627	0.6762
72	BC-5	20.7		2400.	51.5	187.0	2844.		0.0	286.9	99134.	1.201	0.2017	5.648	0.0702	0.0868	0.7671
70	BC-6	20.7		2700.	77.0	161.7	1574.		0.0	285.8	99154.	1.206	0.2680	1.034	0.0425	0.0378	0.8775
119	CC-3	24.4		1800.	51.2	86.3	1373.		0.0	288.1	100141.	1.208	0.2673	4.781	0.0764	0.0741	0.5825
120	CC-4	24.4		2100.	51.5	165.8	2496.		0.0	288.4	100101.	1.206	0.2305	7.316	0.0925	0.0991	0.6734
123	CC-5	24.4		2400.	67.2	221.7	2663.		0.0	289.7	100100.	1.200	0.2632	5.064	0.0833	0.0813	0.7738
127	FC-1	20.7		2100.	51.3	100.3	1564.		3.6	287.0	100132.	1.214	0.2296	3.679	0.0556	0.0617	0.6750
128	FC-2	20.7		2400.	51.6	188.2	2819.		3.6	287.3	100172.	1.212	0.2021	5.621	0.0700	0.0853	0.7666
129	FC-3	20.7		2700.	77.0	160.0	1569.		3.6	288.6	100167.	1.206	0.2680	1.034	0.0420	0.0377	0.8732
124	FC-4	24.4		1800.	51.5	86.5	1378.		3.6	288.0	100151.	1.209	0.2689	4.675	0.0765	0.0743	0.5829
125	FC-5	24.4		2100.	51.4	167.1	2525.		3.6	288.0	100131.	1.208	0.2300	7.347	0.0931	0.1001	0.6738
126	FC-6	24.4		2400.	67.1	225.2	2687.		3.6	287.7	100165.	1.210	0.2628	5.091	0.0839	0.0814	0.7764
130	EC-1	20.7		2100.	51.7	101.6	1608.		7.3	287.0	100152.	1.213	0.2314	3.554	0.0564	0.0635	0.6752
131	EC-2	20.7		2400.	51.9	189.2	2839.		7.3	287.4	100154.	1.211	0.2033	5.537	0.0704	0.0859	0.7667
132	EC-3	20.7		2700.	76.9	164.8	1643.		7.3	288.5	100190.	1.207	0.2677	1.057	0.0433	0.0394	0.8733
133	EC-4	24.4		1800.	51.2	87.8	1393.		7.3	287.6	100212.	1.211	0.2673	4.781	0.0775	0.0750	0.5831
134	EC-5	24.4		2100.	51.7	167.6	2530.		7.3	288.2	100182.	1.208	0.2314	7.254	0.0934	0.1003	0.6738
135	EC-6	24.4		2400.	67.1	227.2	2726.		7.3	288.5	100202.	1.207	0.2628	5.091	0.0849	0.0828	0.7753

4. Overall Noise Levels from Direct Analog Analysis

The following tables provide unweighted (OASPL) and A-weighted (L_A) overall sound pressure levels from quick-look analog data-analysis of measured data for all data-points and microphone positions respectively. Level-numbers which are identified with an asterix are "disturbed data" and should not be interpreted.

ATTITUDE EFFECT, SQUARE-TIP PROP. (1)

DNW PROPELLER NOISE TEST

Run No.	Data Point		In-Flow Noise Level								
			M1	M2	M3	M4	M5	M6	M7	M8	M9
142	GC-1	L _A -dB(A)	89.3	93.3	95.5	96.8	97.2	96.1	92.8*	100.1*	97.2
		OASPL-dB	102.2	108.5*	108.3	109.3	110.8	109.6	105.3	114.9*	109.5
143	GC-2	L _A -dB(A)	96.2	102.8	106.1	107.9	109.2	107.8	100.2*	107.7	106.5
		OASPL-dB	108.4	112.8*	114.2	115.9	117.8	118.3	114.1	117.3*	115.0
144	GC-3	L _A -dB(A)	105.9	117.1*	119.0	121.0	122.2	117.3	119.9*	120.2	120.5
		OASPL-dB	115.7	125.7*	123.4	125.1*	128.1	122.2	133.7*	127.6*	126.9
145	GC-4	L _A -dB(A)	88.4	89.0	88.9	91.3	93.6	92.5	93.8*	98.6*	94.9
		OASPL-dB	100.1	103.9*	103.5	105.3	108.2	107.0	109.6*	113.3*	109.7
146	GC-5	L _A -dB(A)	90.7	95.6	97.8	98.6	99.8	99.2	96.9*	101.8*	99.0
		OASPL-dB	104.3	109.9	111.2	112.1	113.3	113.2	112.5*	115.4	111.7
147	GC-6	L _A -dB(A)	98.0	103.9	106.9	108.6	110.7	108.6	106.6*	109.7	107.5
		OASPL-dB	110.7	117.9*	115.0	116.7	119.3	119.4	120.4*	120.3	118.9
139	LC-1	L _A -dB(A)	90.2	94.9	96.8	97.4	98.2	96.7	94.1	100.3*	98.0
		OASPL-dB	103.4	108.6	109.6	110.5	111.7	110.6	109.6	114.3*	110.4
140	LC-2	L _A -dB(A)	99.0	105.5	108.4	109.6	110.5	108.0	99.3	108.9	107.8
		OASPL-dB	110.2	114.3	115.8	117.5	119.2	119.4	114.6	117.7	116.4
141	LC-3	L _A -dB(A)	109.2	120.6*	122.1	123.4	123.6	117.4	120.5*	122.4	122.2
		OASPL-dB	117.5	128.8*	125.5	126.4	128.9*	122.7	133.6*	128.1	127.6
136	LC-4	L _A -dB(A)	88.4	88.8	90.5	91.5	94.0	93.3	93.9*	98.7*	95.0
		OASPL-dB	101.1	103.9	105.1	106.7	108.9	107.8	106.7*	113.4*	109.7
137	LC-5	L _A -dB(A)	92.0	97.1	99.0	100.2	100.9	99.4	96.1*	101.7*	99.0
		OASPL-dB	106.4	111.0	112.2	113.2	114.5	114.7	112.5	115.8*	112.5
138	LC-6	L _A -dB(A)	100.2	106.5	109.0	110.5	111.9	109.2	107.4*	110.6	109.0
		OASPL-dB	112.5	116.4	117.0	118.5	120.7	120.5	120.9*	120.9	120.4*
73	BC-4	L _A -dB(A)	91.7	96.9	--	98.7	99.1	--	95.7*	100.9*	99.6
		OASPL-dB	104.8	111.6*	--	111.8	113.0	--	109.7*	115.1*	112.4
72	BC-5	L _A -dB(A)	101.3	107.7	--	110.7	111.4	--	100.2*	109.9	109.9
		OASPL-dB	111.8	116.1	--	118.8	120.4	--	115.6*	119.2	118.2
70	BC-6	L _A -dB(A)	116.0*	124.1	125.9	126.2	124.5	--	121.5*	124.5	125.3
		OASPL-dB	124.2*	129.2*	128.0	128.5	127.3	--	134.6*	128.5	129.2
119	CC-3	L _A -dB(A)	88.6	90.0	90.9	92.1	94.0	93.4	93.4*	99.6*	94.8
		OASPL-dB	102.9	105.2	106.5	107.7	109.7	108.9	106.4*	115.5*	110.4
120	CC-4	L _A -dB(A)	92.7	97.8	99.8	100.7	101.5	100.2	96.6*	102.9*	100.3
		OASPL-dB	107.5	112.1	113.1	114.4	115.8	116.0	114.1*	117.1*	113.6
123	CC-5	L _A -dB(A)	102.3	108.5	111.2	111.7	112.3	109.1	107.7*	111.8	110.2
		OASPL-dB	113.6	118.4*	118.7	119.9	121.7	121.3	123.1*	121.5	120.7

*Higher "R" values

Linear- and A-weighted Overall Noise Levels from Analog Data-analysis

ATTITUDE EFFECT, SQUARE-TIP PROP. (2)

DNW PROPELLER NOISE TEST

Run No.	Data Point		In-Flow Noise Level								
			M1	M2	M3	M4	M5	M6	M7	M8	M9
127	FC-1	L -dB(A)	92.7	97.8	99.0	99.2	99.5	97.4	93.9	101.8*	99.0
		OASPL-dB	106.6	111.3*	111.7	112.8	113.9	113.4	110.3	115.5*	112.4
128	FC-2	L -dB(A)	103.7	109.9	111.7	111.7	111.7	108.0	99.6	110.8	110.0
		OASPL-dB	113.6	117.3	119.2	120.3	121.4	120.7	115.8	119.7	118.5
129	FC-3	L -dB(A)	118.5	127.8	128.3	127.0	124.9	117.4	121.5*	125.5	125.1
		OASPL-dB	122.9	133.2*	129.9	129.3	130.1	124.6	133.8*	129.6	128.8
124	FC-4	L -dB(A)	89.2	91.1	91.8	92.6	94.0	94.2	91.7*	99.6*	95.0
		OASPL-dB	104.5	108.1*	108.2	109.4	111.2	110.4	108.3*	115.7*	111.1
125	FC-5	L -dB(A)	94.2	99.4	101.3	102.1	102.5	100.6	96.0*	104.5	101.3
		OASPL-dB	108.8	113.2	114.5	115.9	117.1	117.1	114.3*	117.6*	114.8
126	FC-6	L -dB(A)	105.7	111.6	113.5	113.7	113.5	109.7	108.0*	113.0	112.1
		OASPL-dB	115.5	120.3	120.9	121.8	123.3	122.7	121.6*	122.3	122.0
130	EC-1	L -dB(A)	94.2	98.9	100.0	100.5	100.5	98.0	94.7*	101.8	100.0
		OASPL-dB	108.3	112.4	113.2	114.2	115.2	114.6	112.1*	116.2*	113.1
131	EC-2	L -dB(A)	106.7	112.0	113.5	112.8	112.1	108.0	99.5	112.0	110.9
		OASPL-dB	115.2	119.2	120.7	121.7	122.5	121.5	116.3	120.7	119.7
132	EC-3	L -dB(A)	123.4	130.9	130.2	127.8	125.3	117.8	121.4*	126.3	126.4
		OASPL-dB	126.5	135.1	131.7	130.5	130.8	125.6	133.8*	130.0	130.0
133	EC-4	L -dB(A)	89.2	92.2*	93.0	93.6	94.9	94.2	95.3*	100.0*	95.2
		OASPL-dB	106.0	109.3*	109.7	111.0	112.3	111.5	109.3*	115.4*	111.7
134	EC-5	L -dB(A)	96.7	100.9	102.5	103.1	103.2	101.1	96.6	103.7*	102.1
		OASPL-dB	110.3	114.6	116.0	117.3	118.3	118.2	115.1	117.4	115.8
135	EC-6	L -dB(A)	109.1	114.3	115.5	115.1	114.4	110.2	109.0*	114.0	113.2
		OASPL-dB	117.3	121.7	122.6	123.4	124.6	123.6	121.3*	123.1	122.9

*Higher "R" values

Linear- and A-weighted Overall Noise Levels from Analog Data-analysis

5. Acoustic Pressure-time Histories and Narrow-band Spectra

Acoustic data as presented in this section have been derived from a computer analysis of digitized analog tape-readings. For each data-point and microphone position respectively the data were processed and are presented in two different ways:

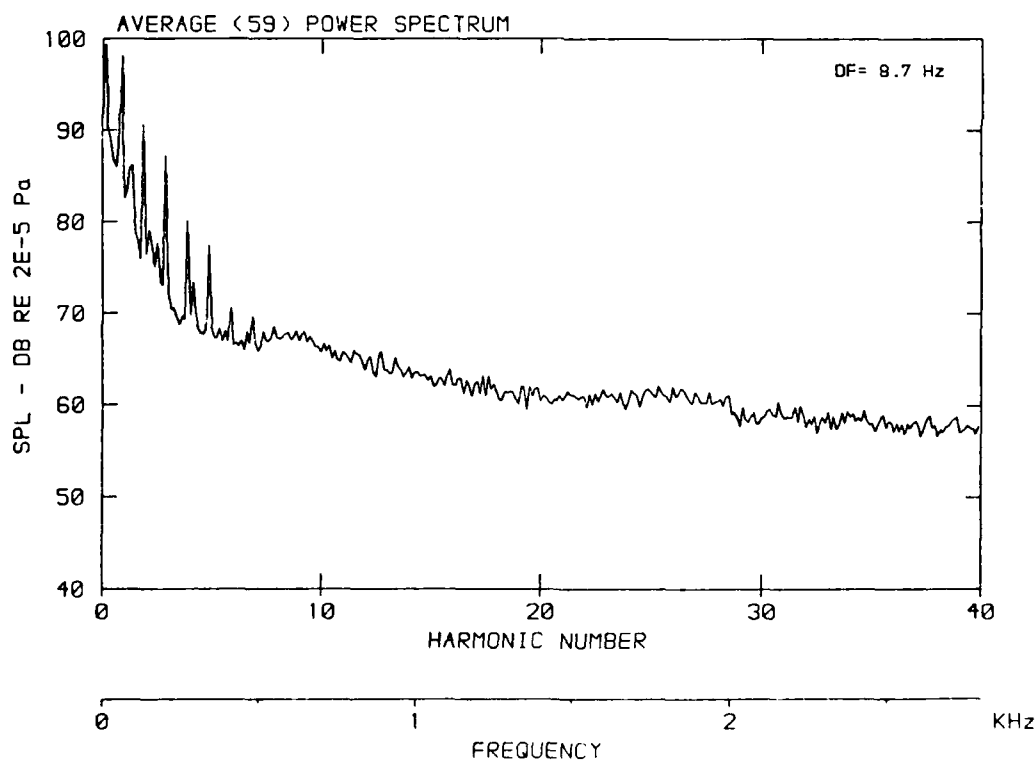
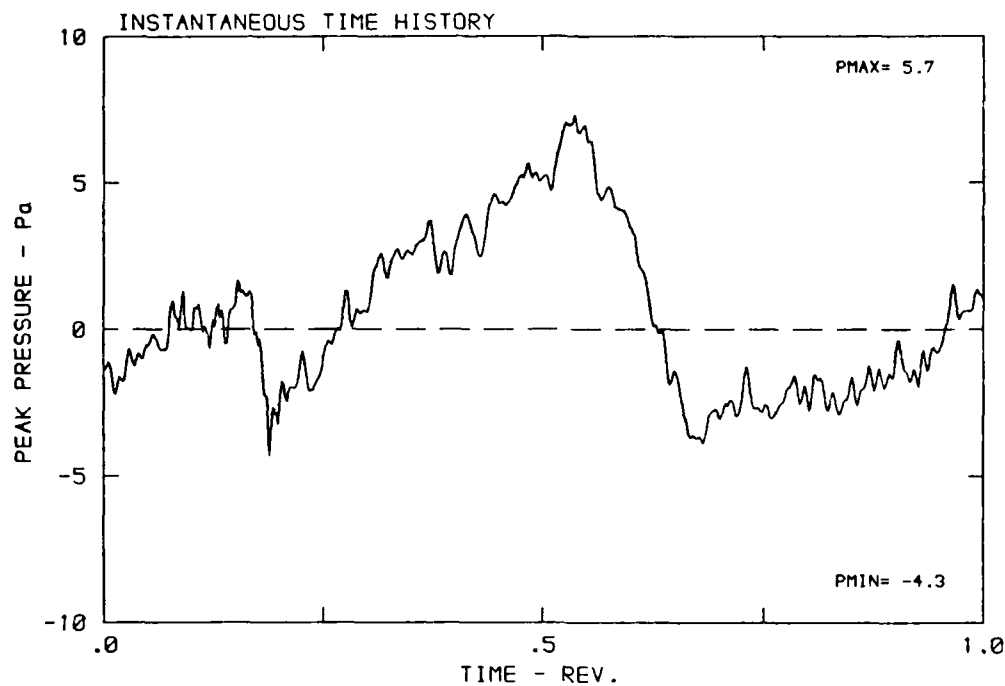
- a) A single instantaneous pressure-time history is presented and labeled "Instantaneous Time History" together with a power spectrum which had been calculated as an energy average of individual power spectra corresponding to a certain number of instantaneous pressure-time histories. This spectrum is labeled "Average (xx) Power Spectrum". The "xx" in the label denotes the number of time histories averaged in that particular spectrum.
- b) A certain number of instantaneous pressure-time histories is averaged in the time-domain and the resulting pressure averaged time-history is labeled "Average (xx) Time History". The "xx" in the label denotes the number of averaged instantaneous time-histories.

The value of ΔP in the brackets behind this label denotes the maximum peak-to-peak pressure amplitude difference in %, when referenced to the minimum peak-to-peak pressure amplitude difference as detected in the "xx" instantaneous time histories. The magnitude of ΔP can be taken as indicator to judge the stationarity (quality) of the respective data-record. If the value of ΔP is in excess of 496% respective data are marked with a triple star (***) to indicate that the data are heavily distorted.

From the pressure-averaged time-history a pressure level spectrum is calculated and labeled "Power Spectrum of Averaged Time History".

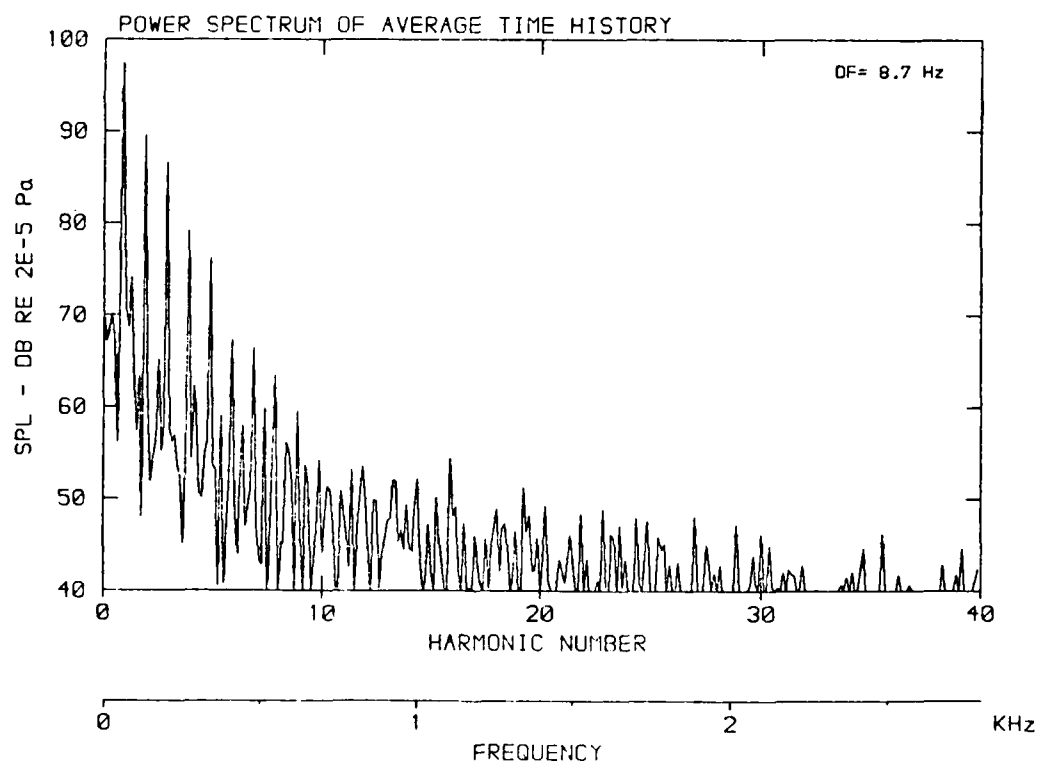
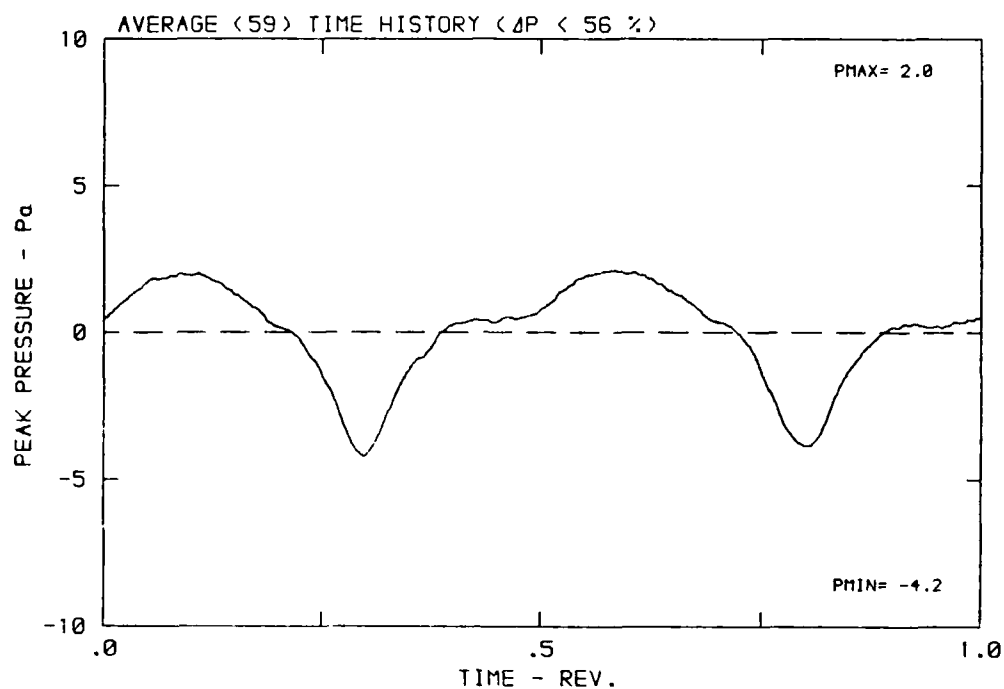
DATA POINT: GC-1 RUN: 142 MP: 1

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



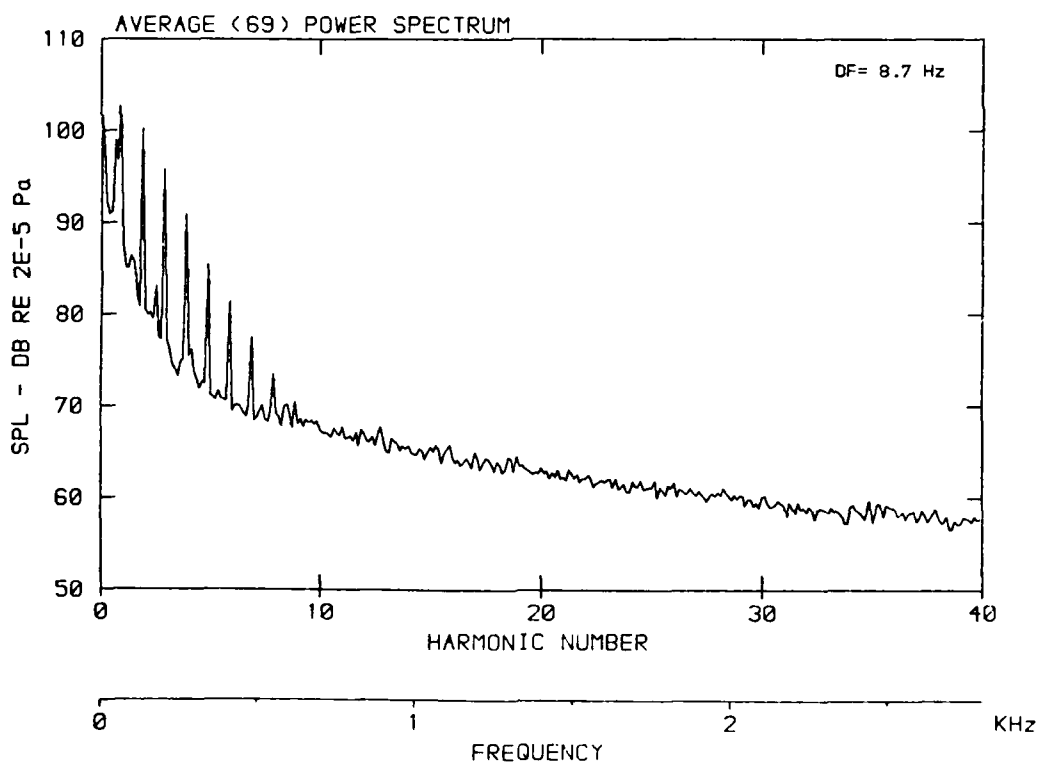
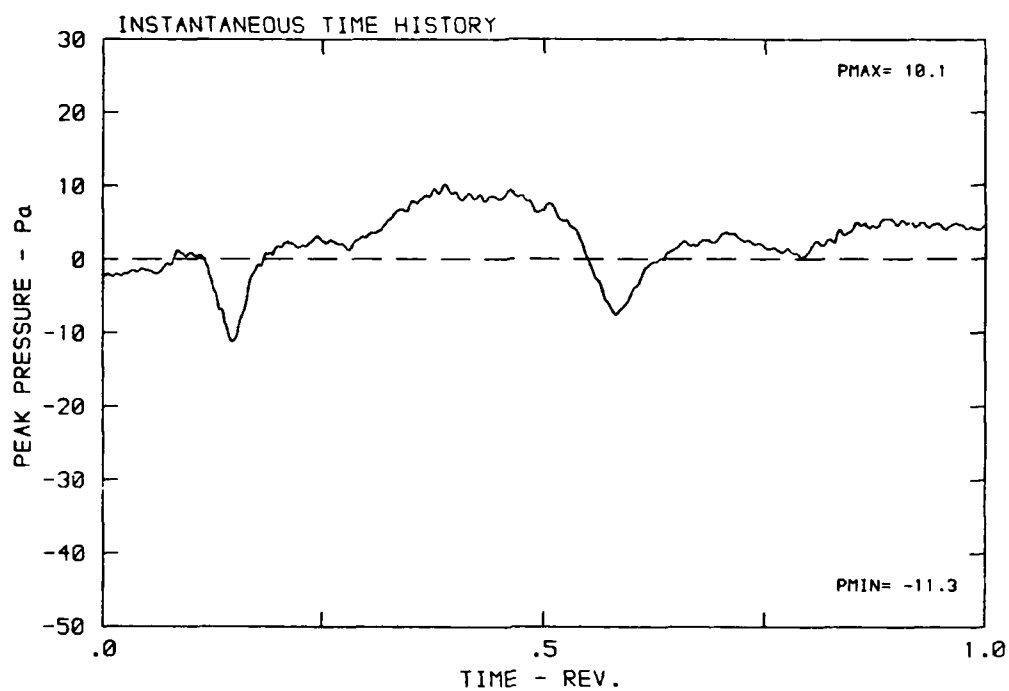
DATA POINT: GC-1 RUN: 142 MP: 1

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



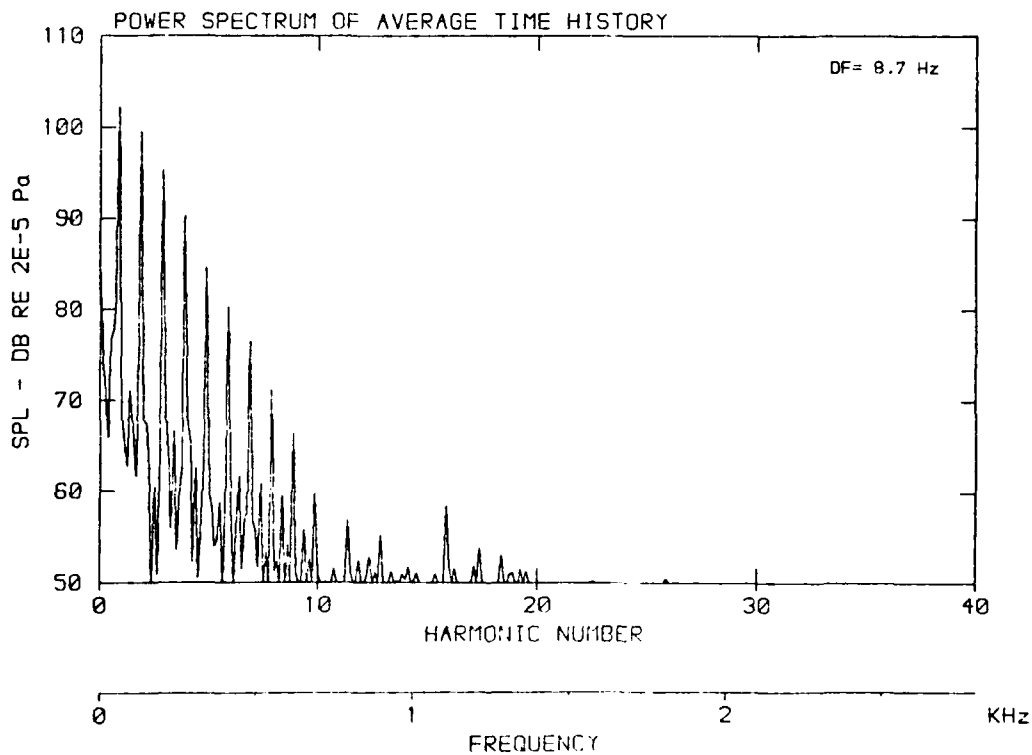
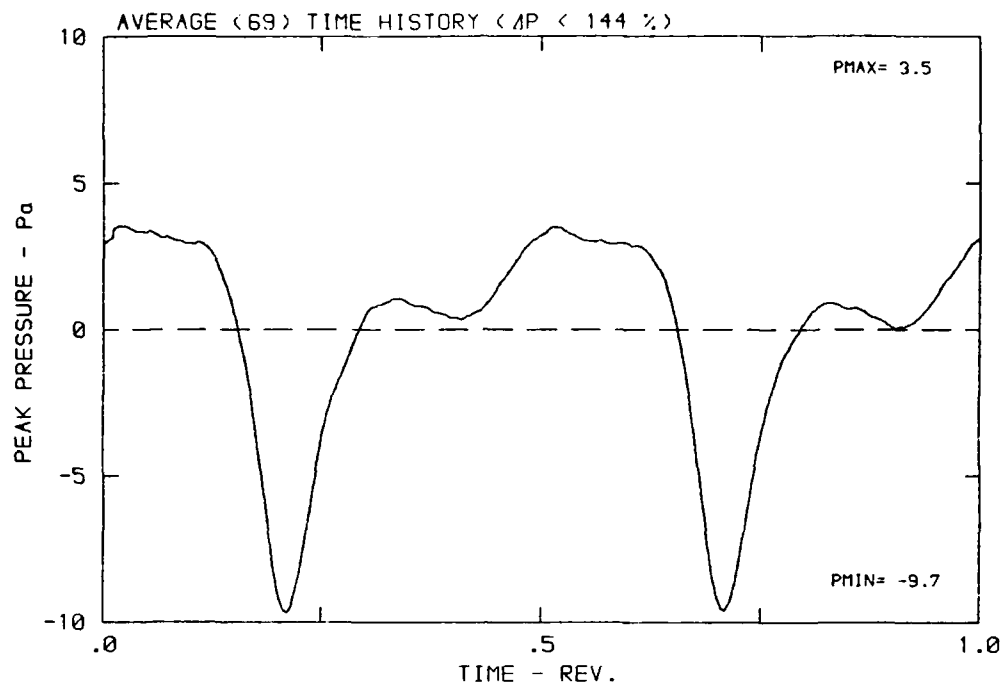
DATA POINT: GC-1 RUN: 142 MP: 2

B: 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



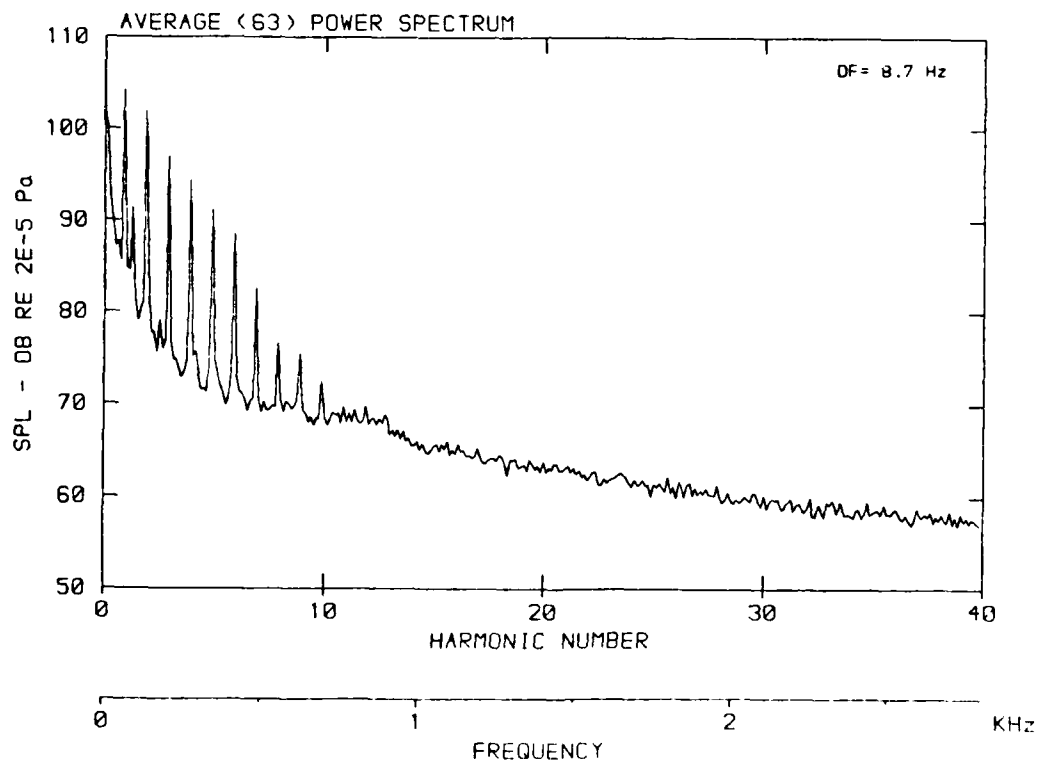
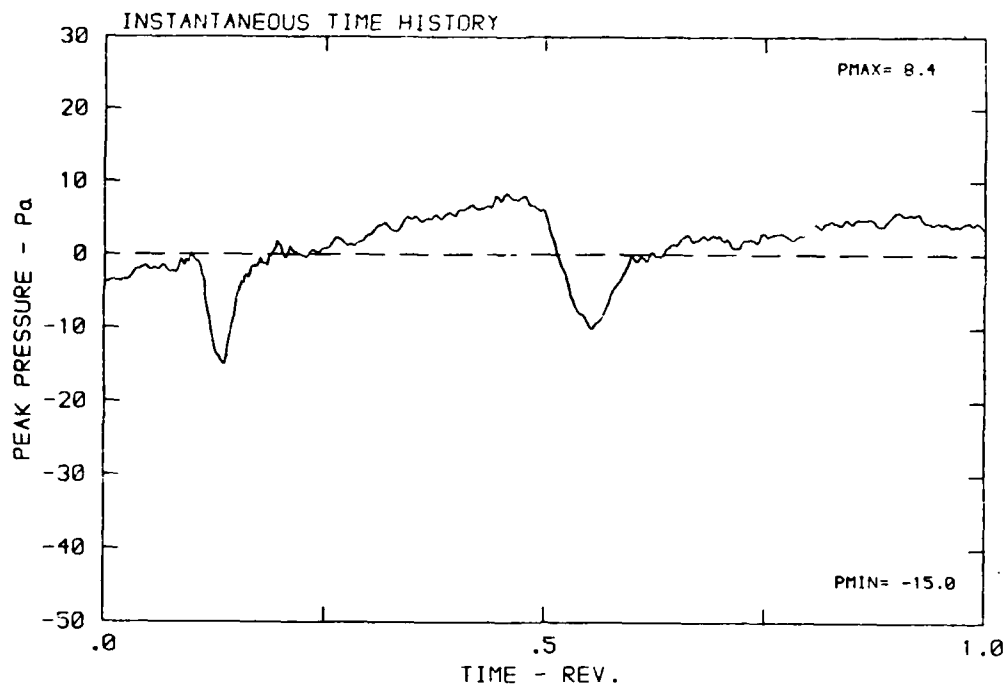
DATA POINT: GC-1 RUN: 142 MP: 2

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



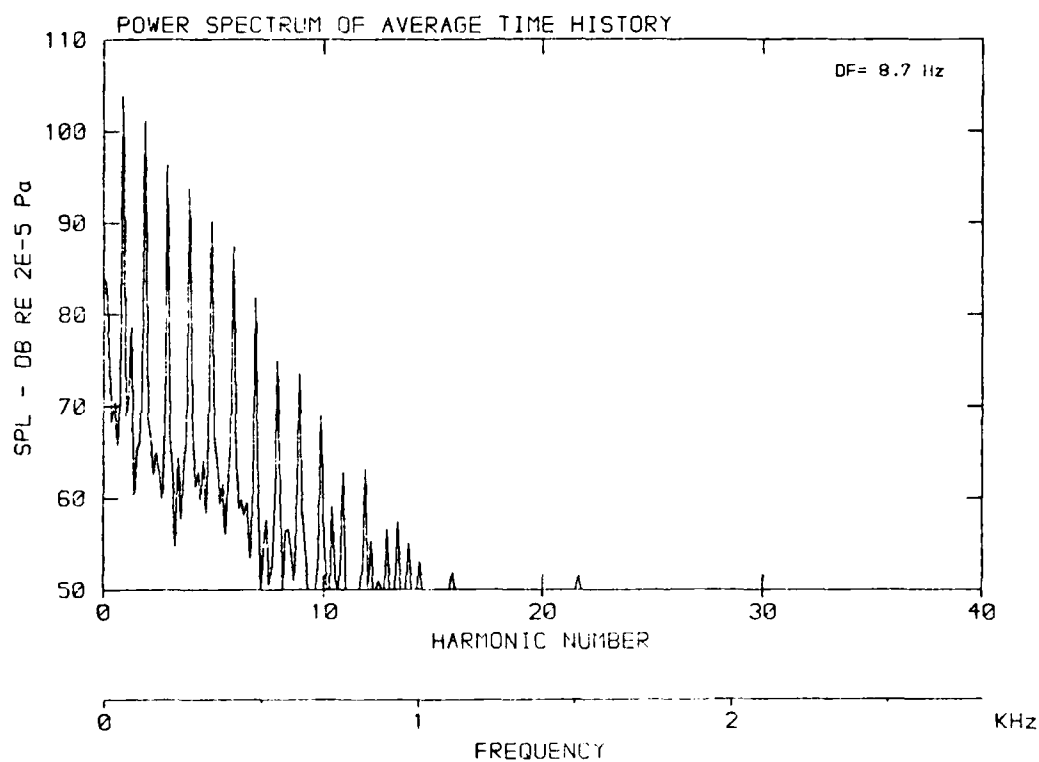
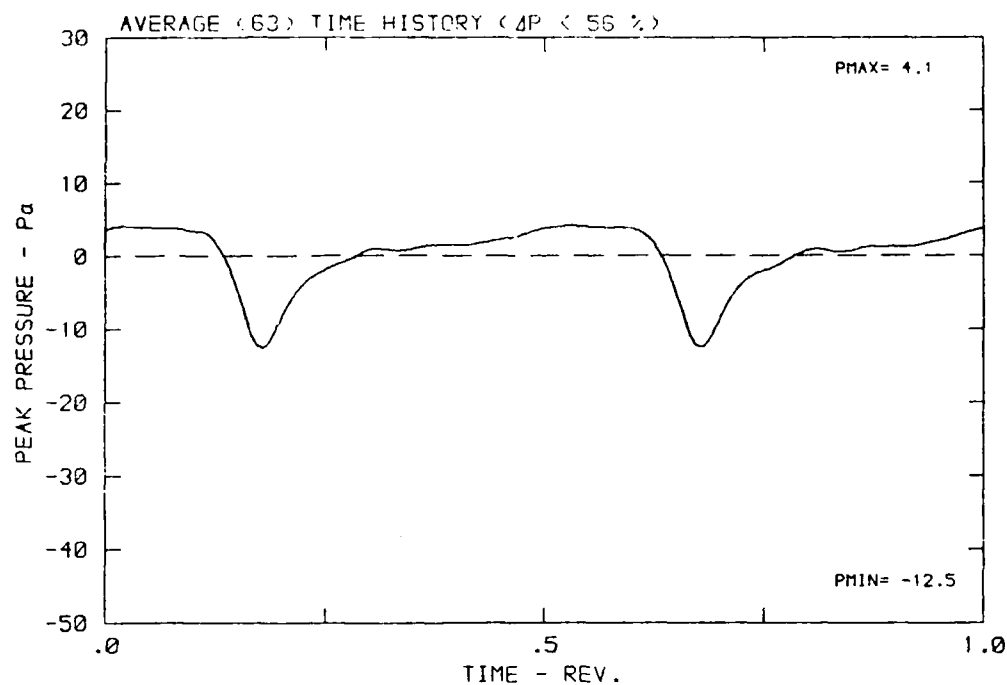
DATA POINT: GC-1 RUN: 142 MP: 3

β : 20.7° MH: .6753 n: 2100 rpm v/u : .232 ϕ : -7.4° T: 287.0 K



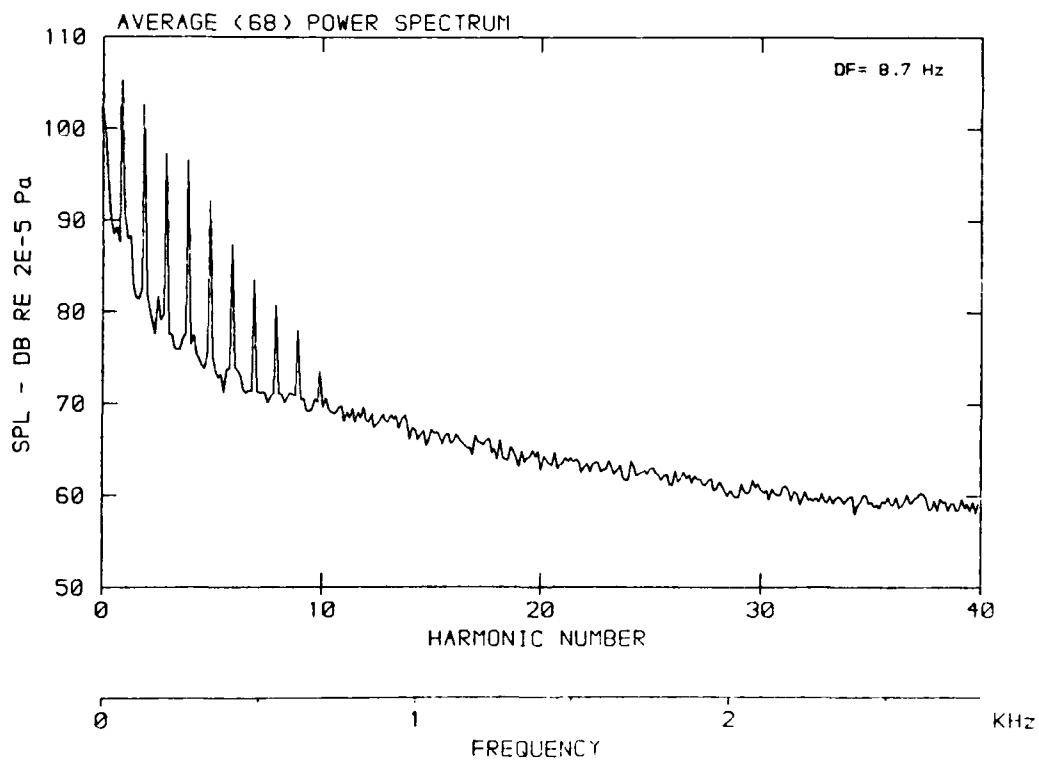
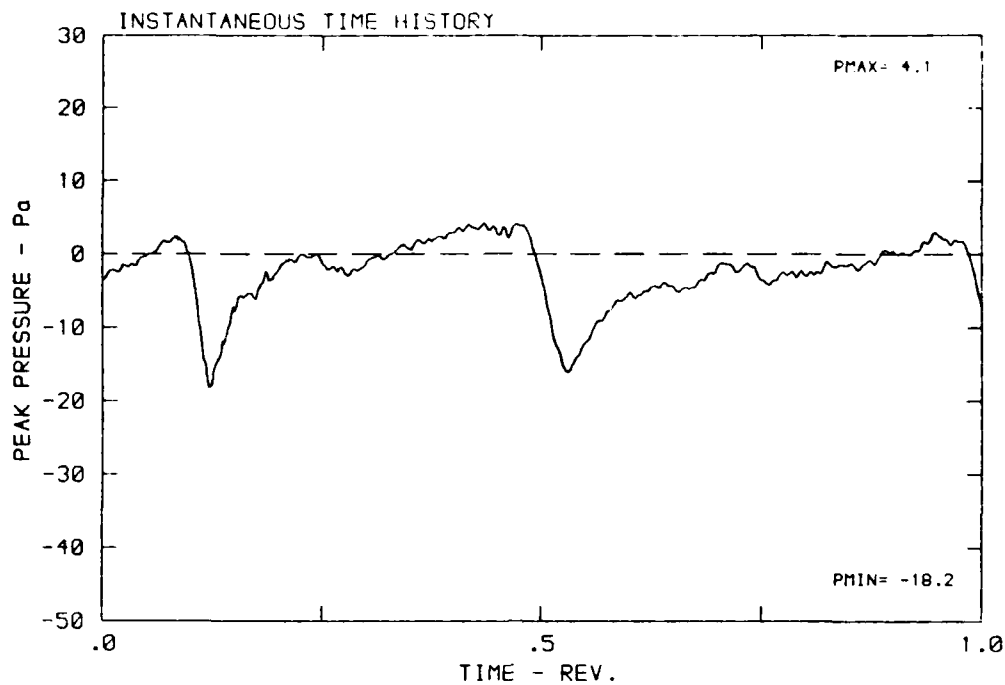
DATA POINT: GC-1 RUN: 142 MP: 3

β : 20.7° MH: .6753 n: 2100 rpm v/u : .232 ϕ : -7.4° T: 287.0 K



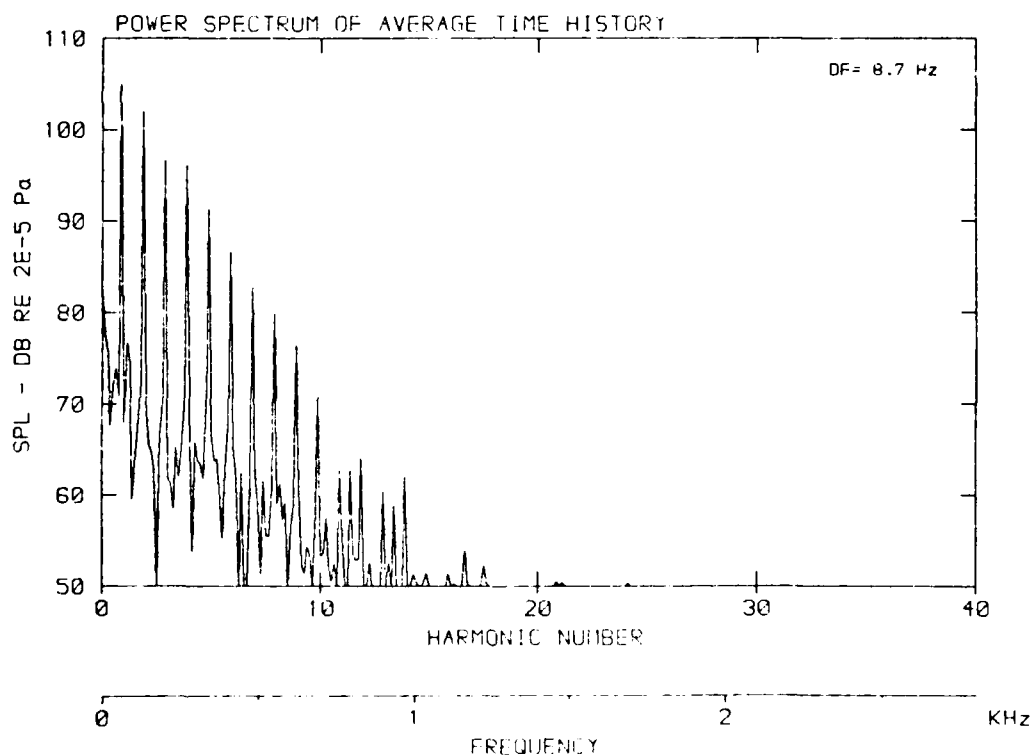
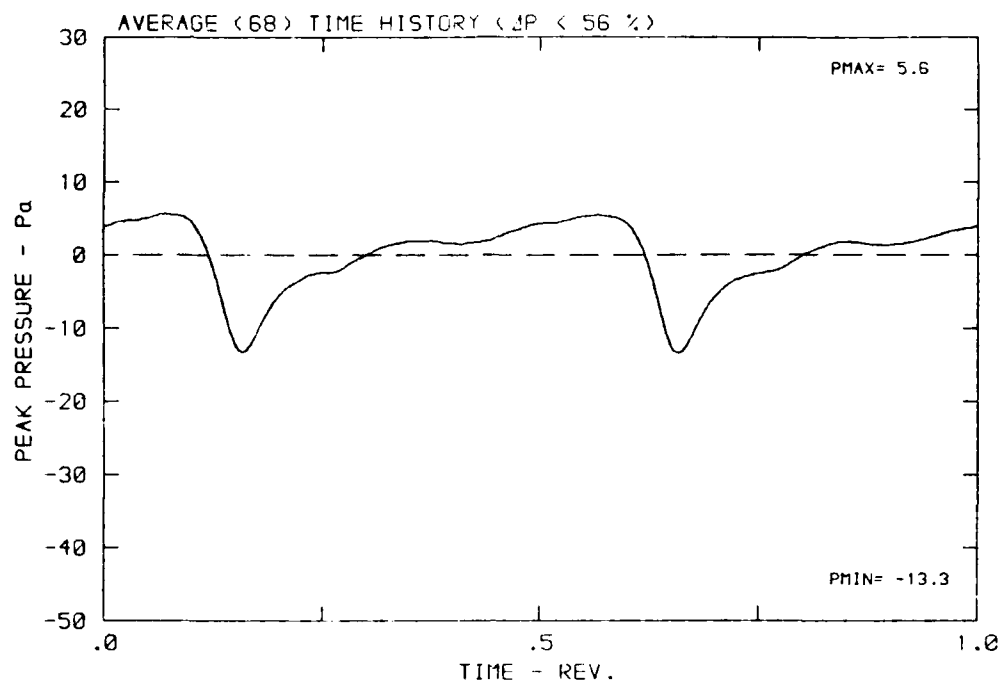
DATA POINT: GC-1 RUN: 142 MP: 4

β : 20.7° MH: .6753 n: 2100 rpm ν : .232 ϕ : -7.4° T: 287.0 K



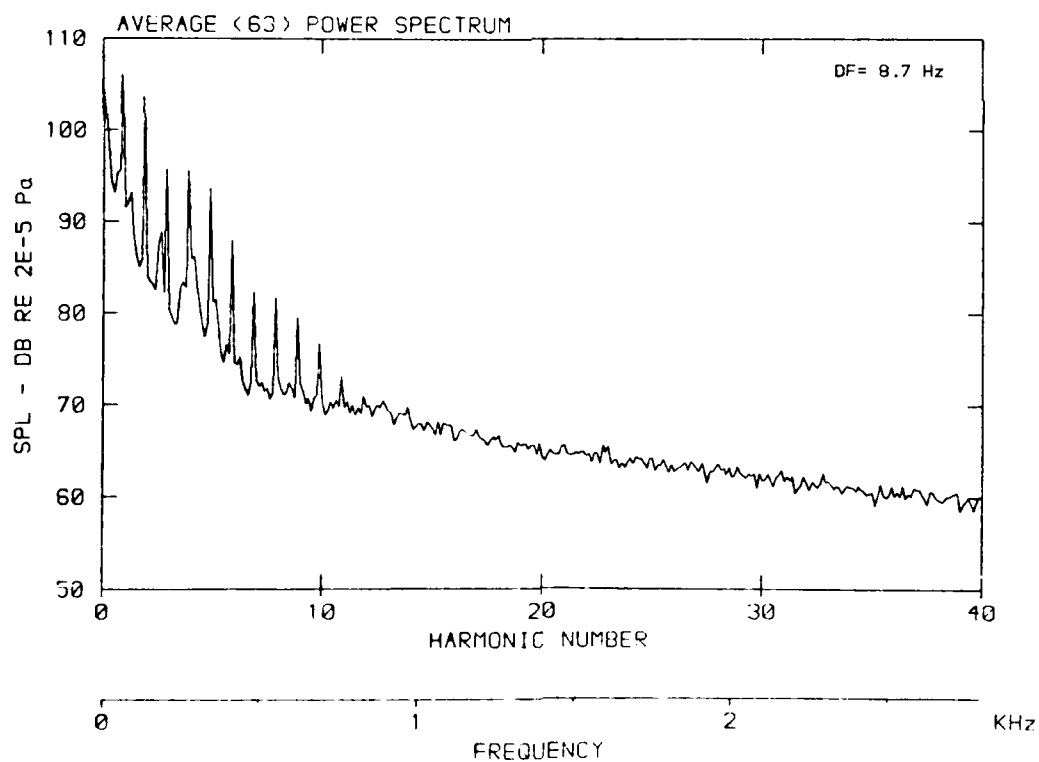
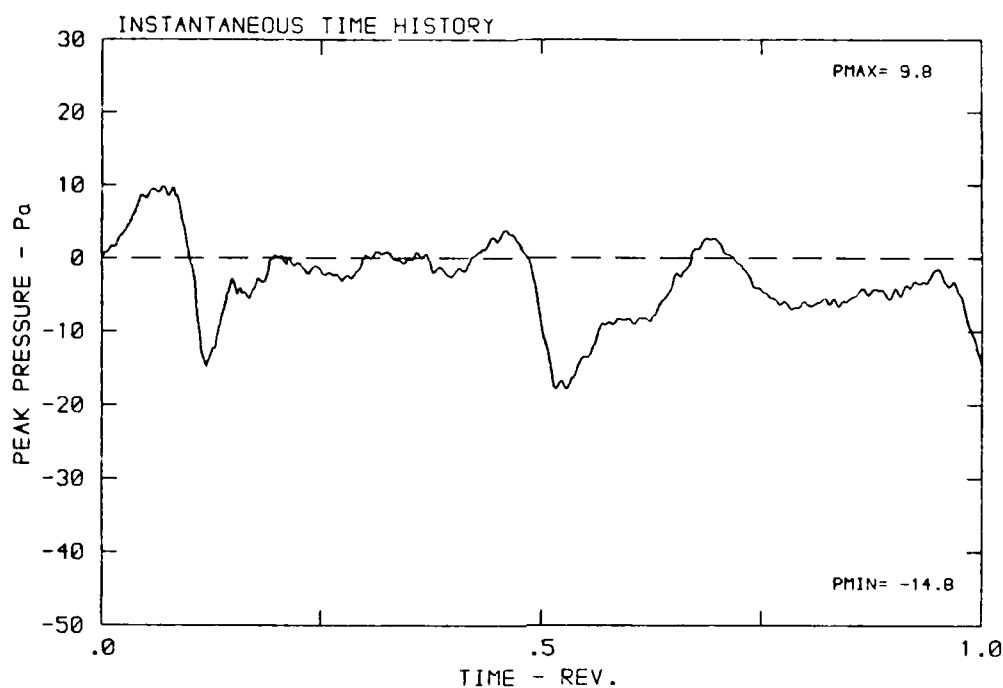
DATA POINT: GC-1 RUN: 142 MP: 4

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



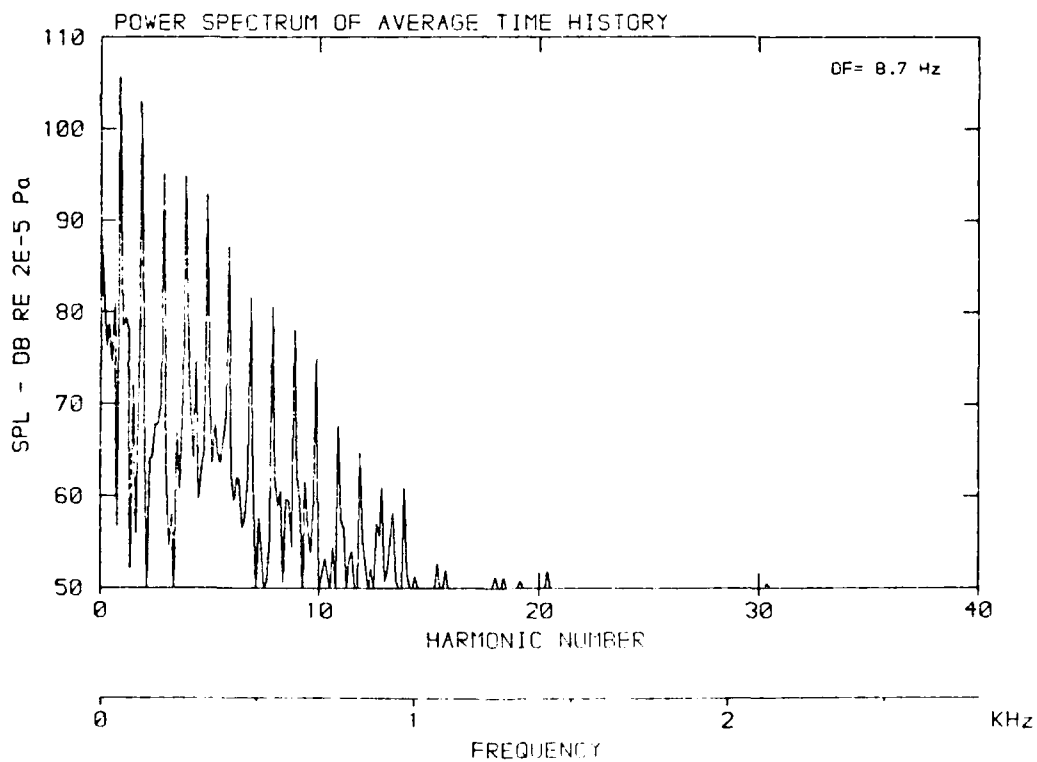
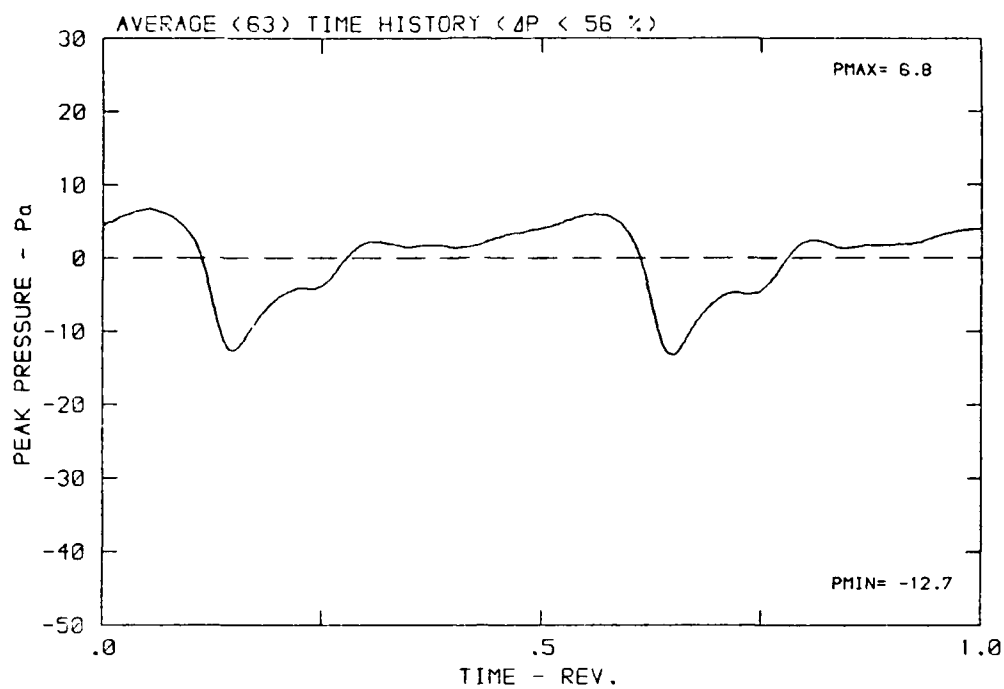
DATA POINT: GC-1 RUN: 142 MP: 5

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



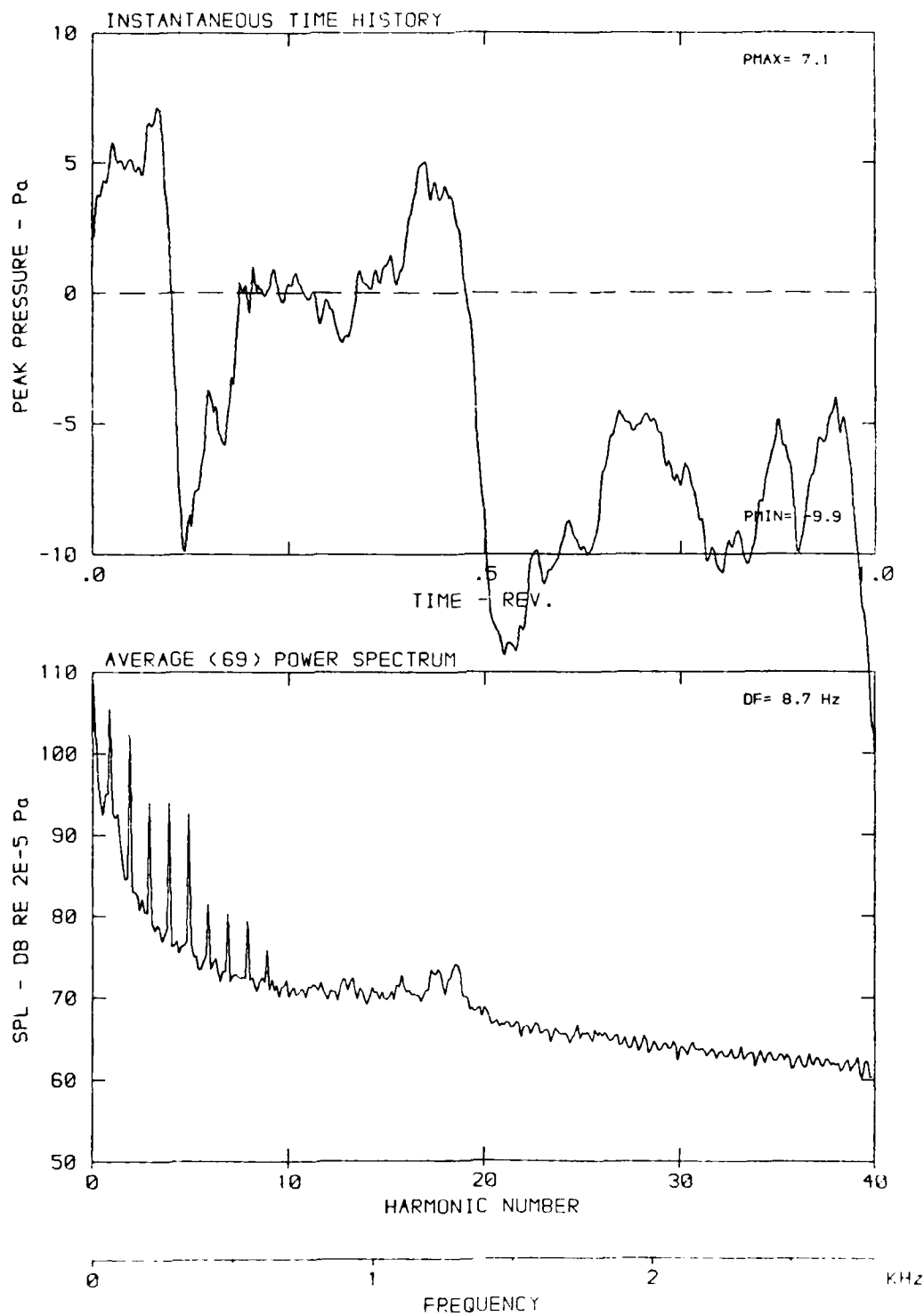
DATA POINT: GC-1 RUN: 142 MP: 5

β : 20.7° MH: .6753 n: 2100 rpm v/u : .232 ϕ : -7.4° T: 287.0 K



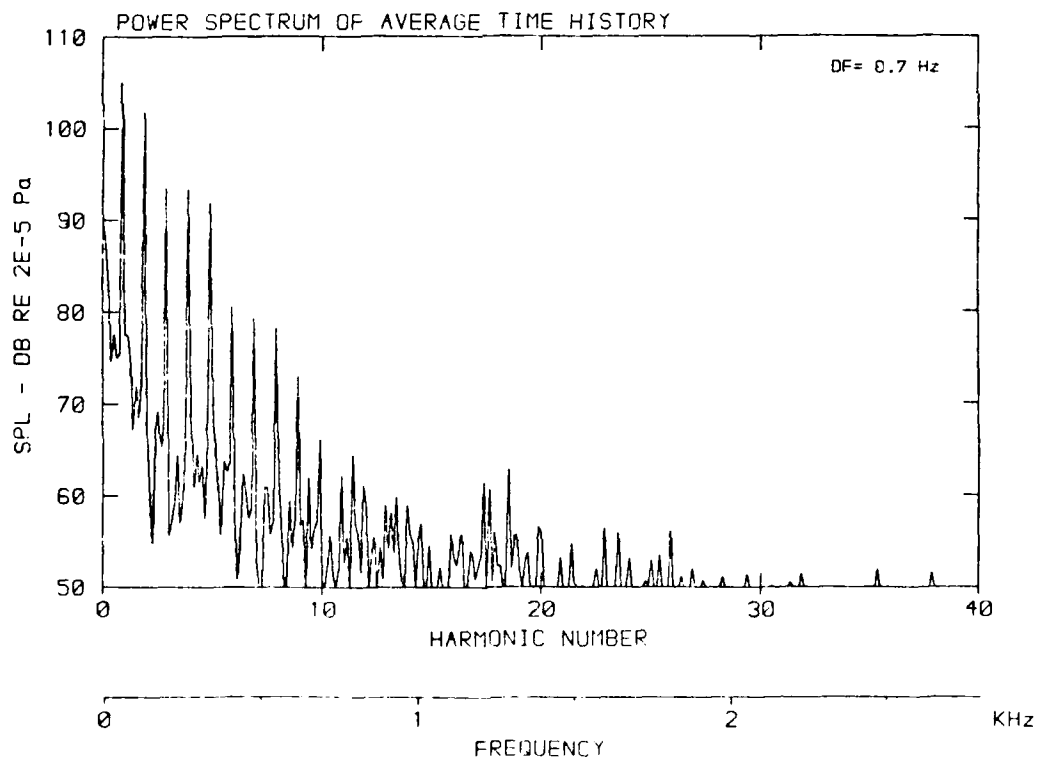
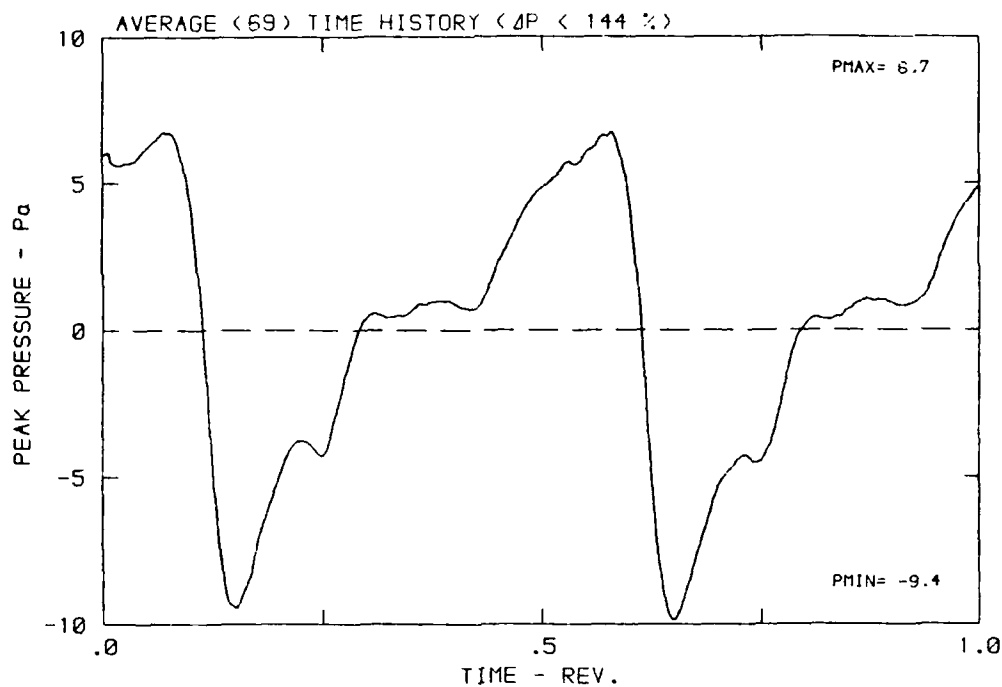
DATA POINT: GC-1 RUN: 142 MP: 6

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



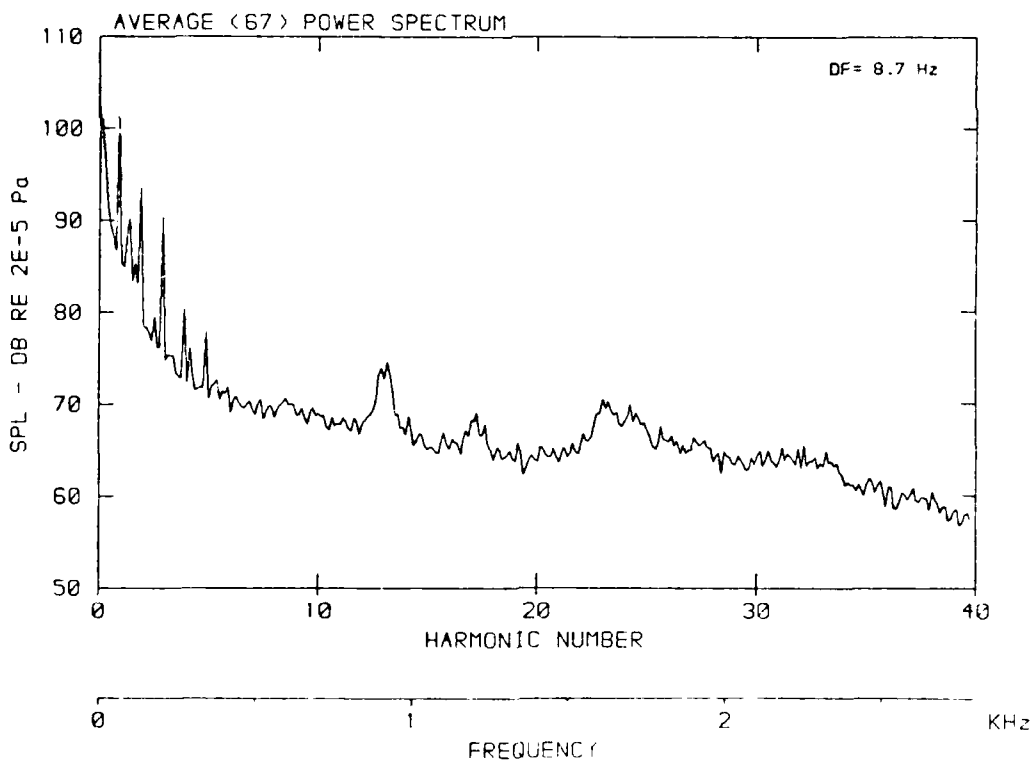
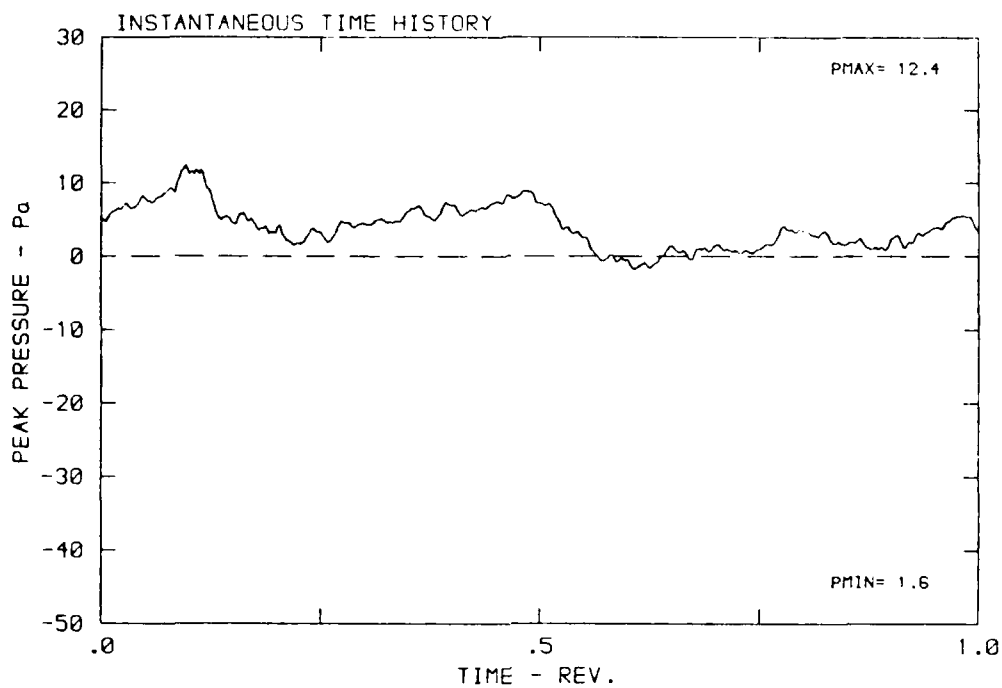
DATA POINT: GC-1 RUN: 142 MP: 6

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



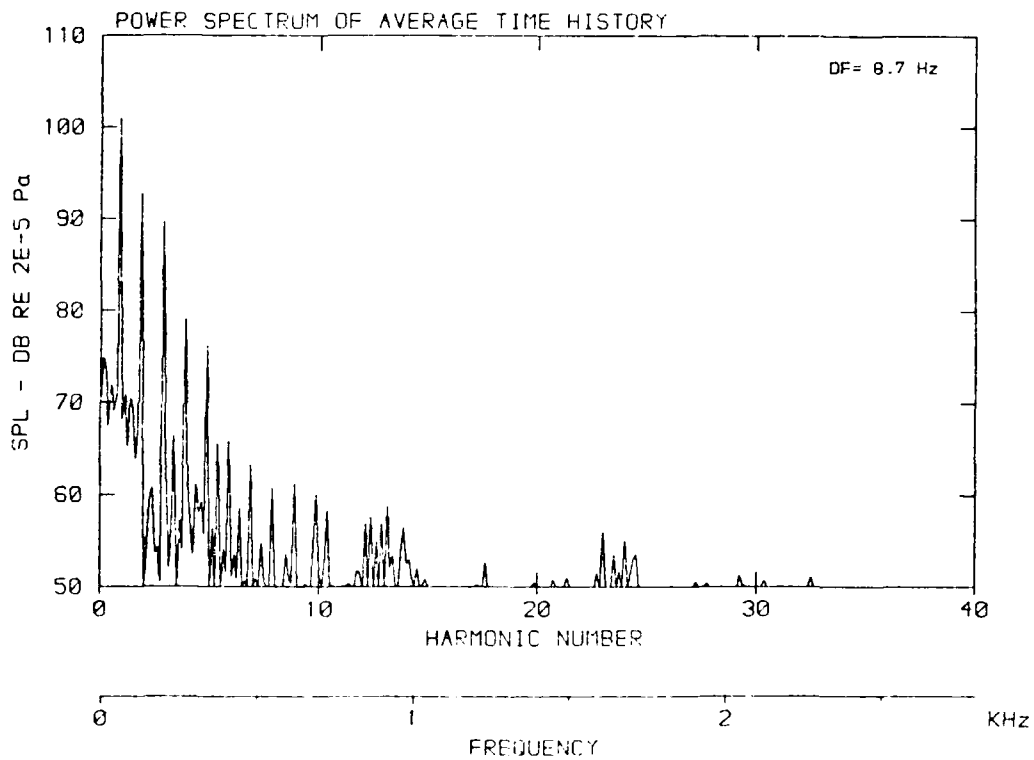
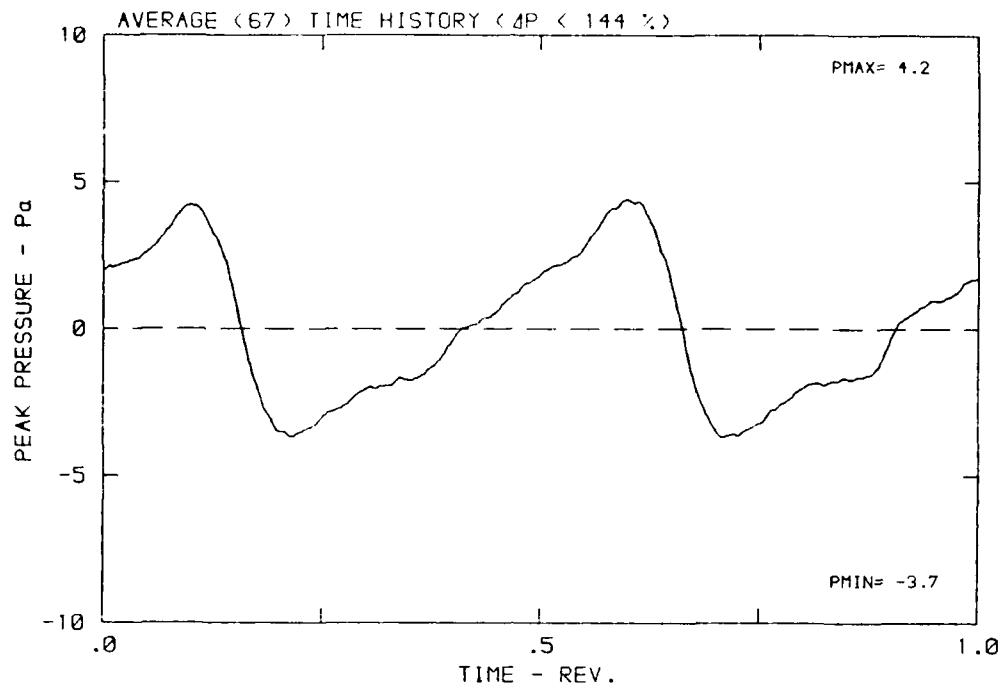
DATA POINT: GC-1 RUN: 142 MP: 7

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



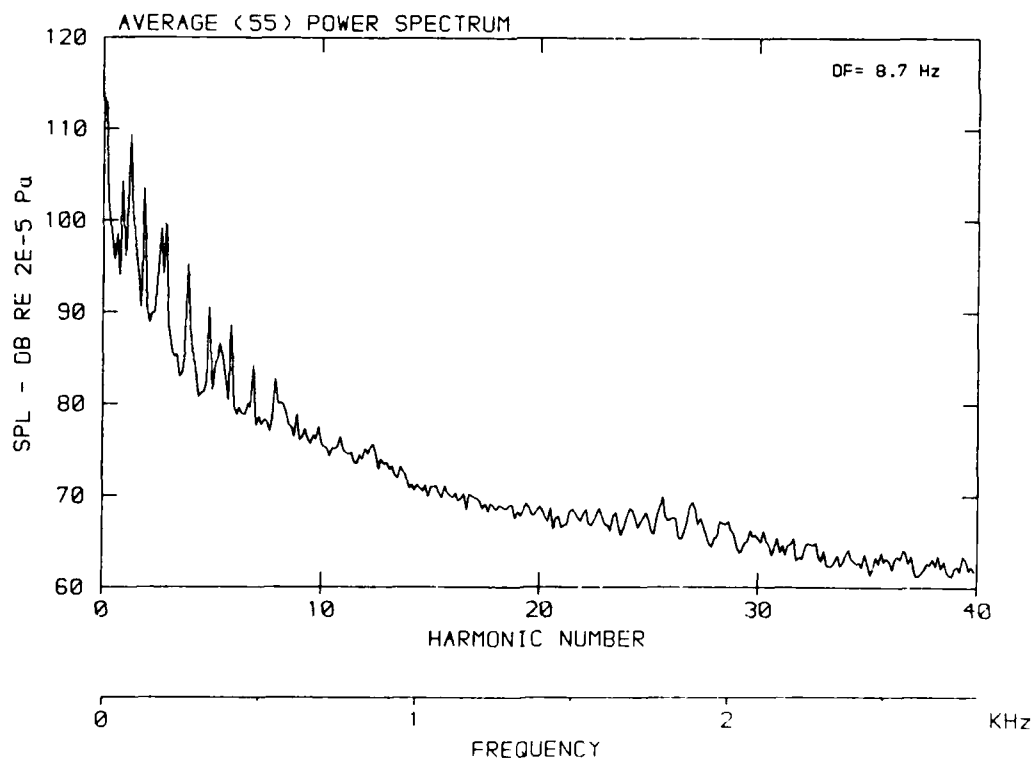
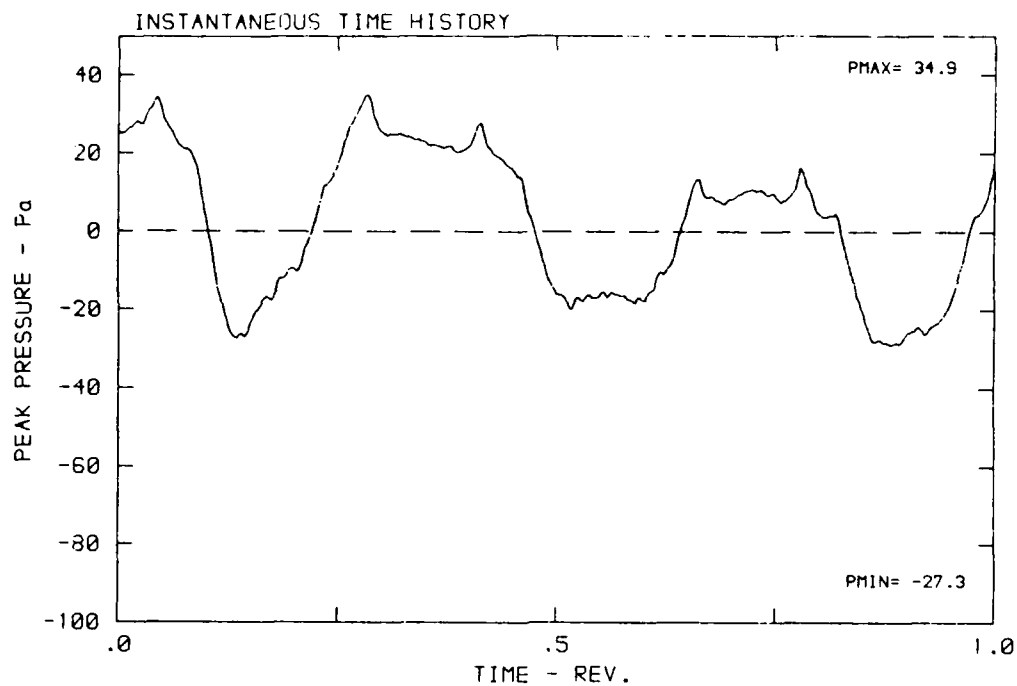
DATA POINT: GC-1 RUN: 142 MP: 7

β : 20.7° MH: .6753 n: 2100 rpm v/u : .232 ϕ : -7.4° T: 287.0 K



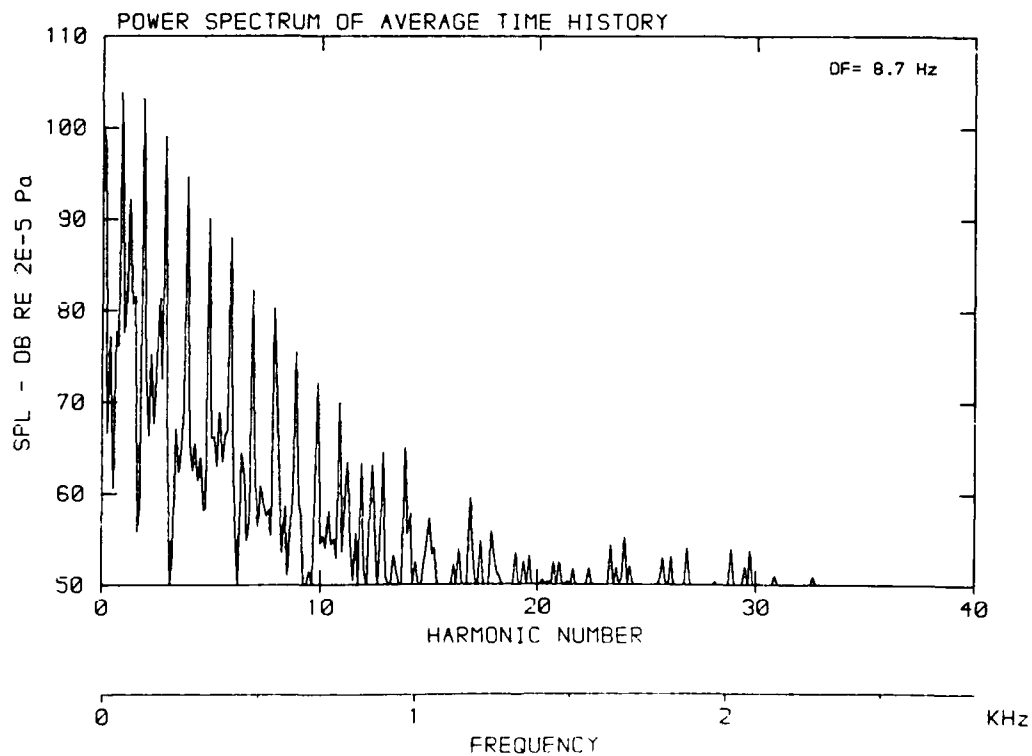
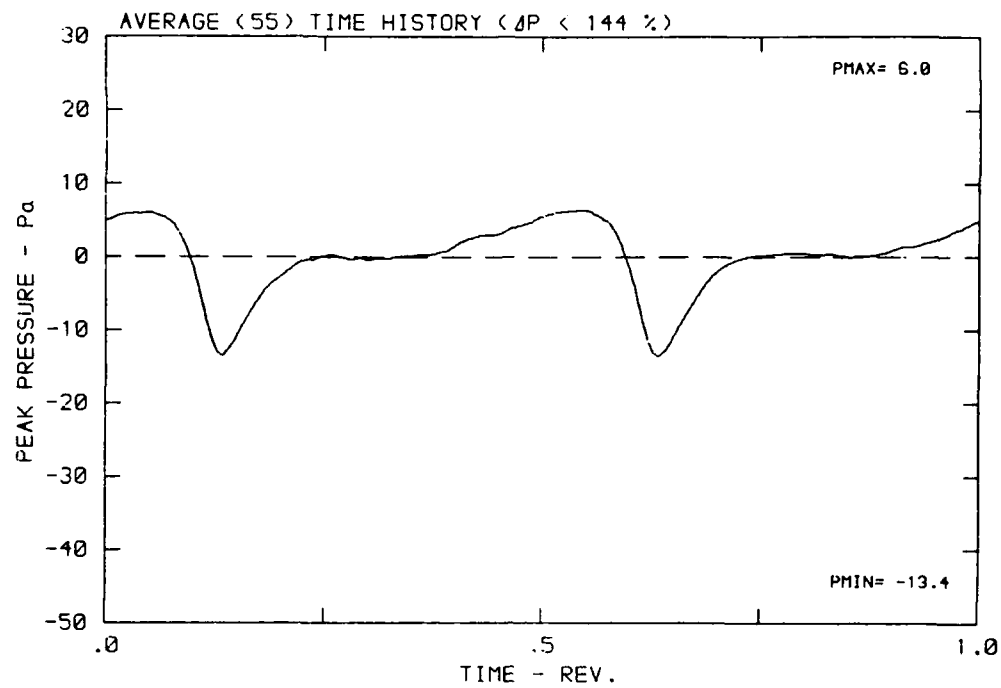
DATA POINT: GC-1 RUN: 142 MP: 8

β : 20.7° MH: .6753 n: 2100 rpm v/u : .232 ϕ : -7.4° T: 287.0 K



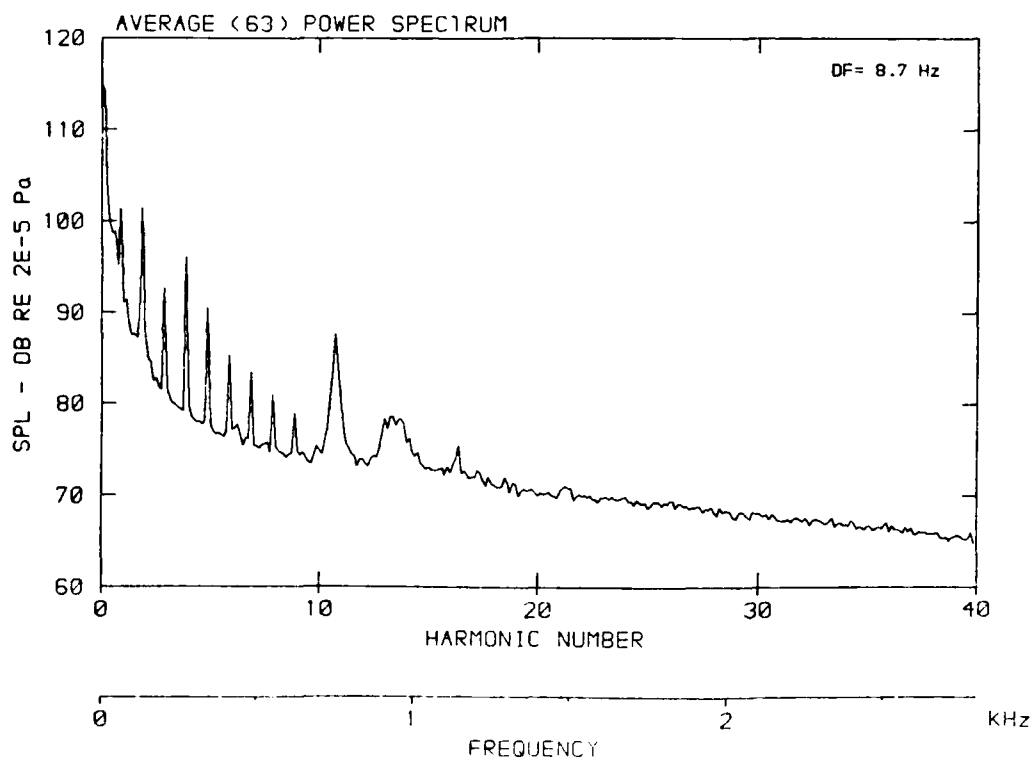
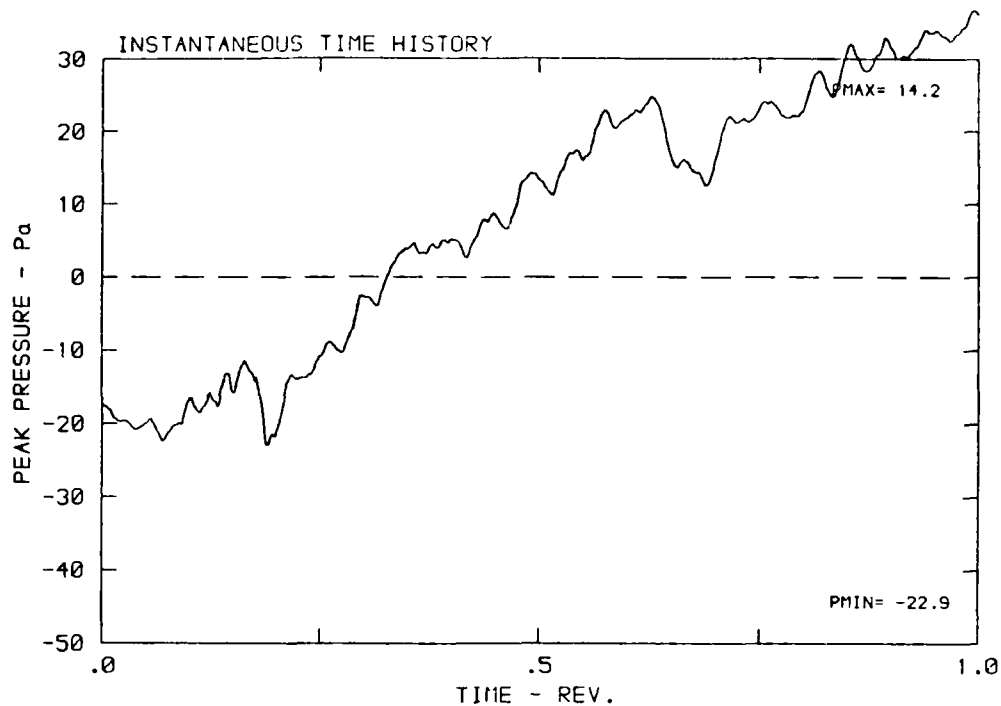
DATA POINT: GC-1 RUN: 142 MP: 8

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



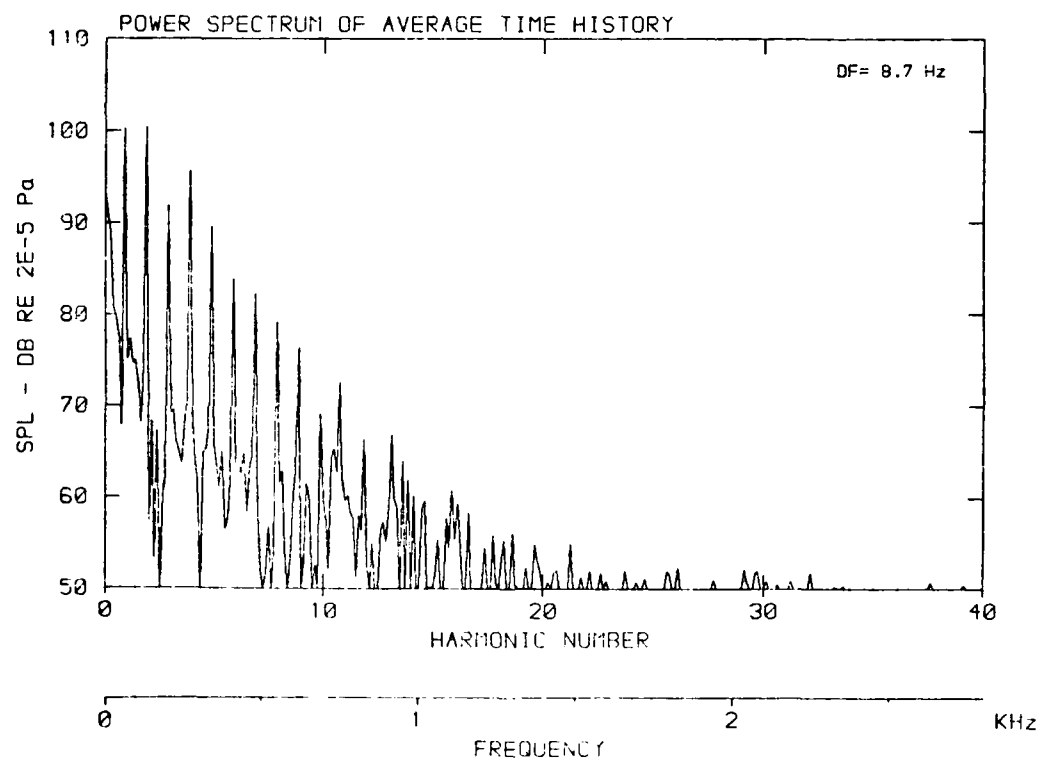
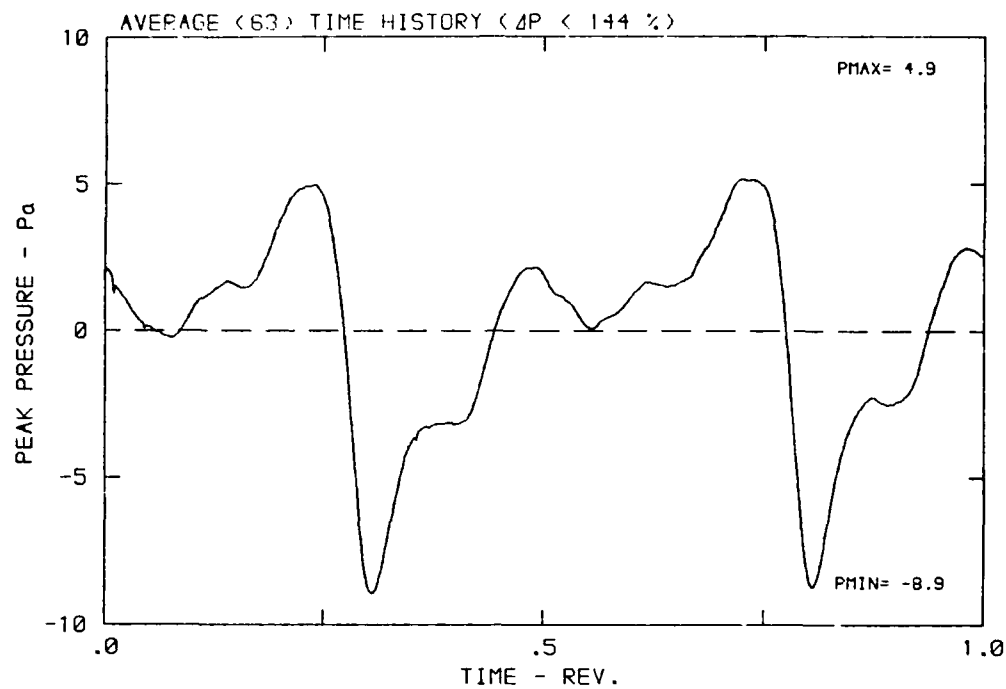
DATA POINT: GC-1 RUN: 142 MP: 9

β : 20.7° MH: .6753 n: 2100 rpm v/u: .232 ϕ : -7.4° T: 287.0 K



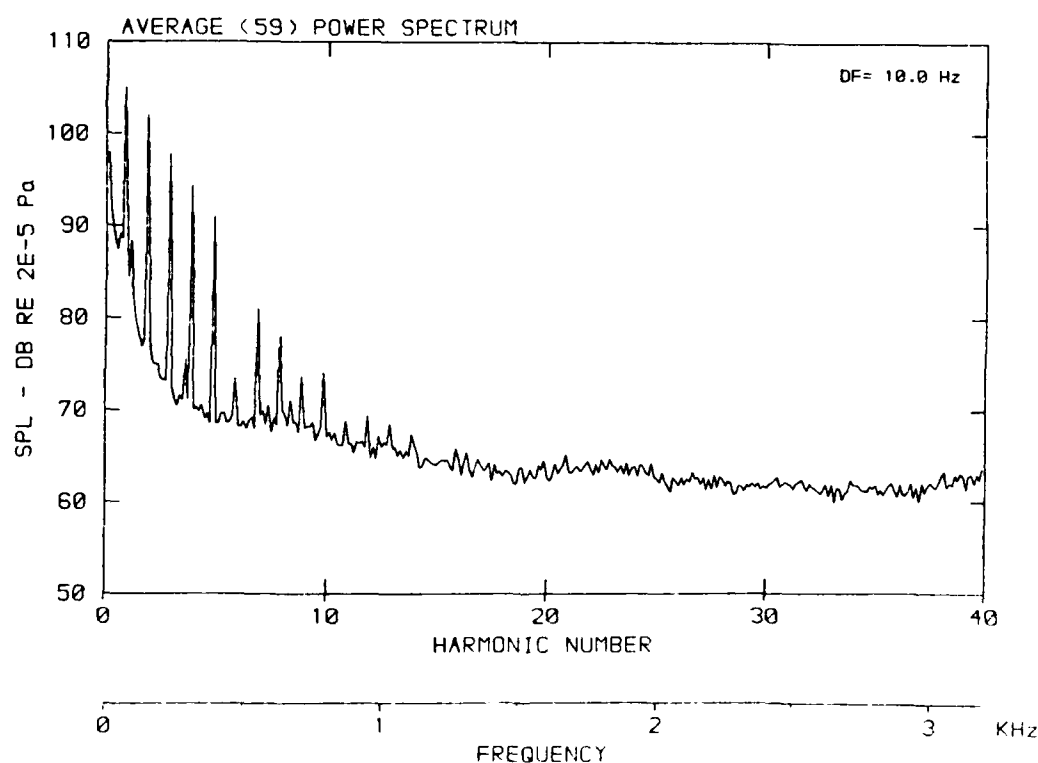
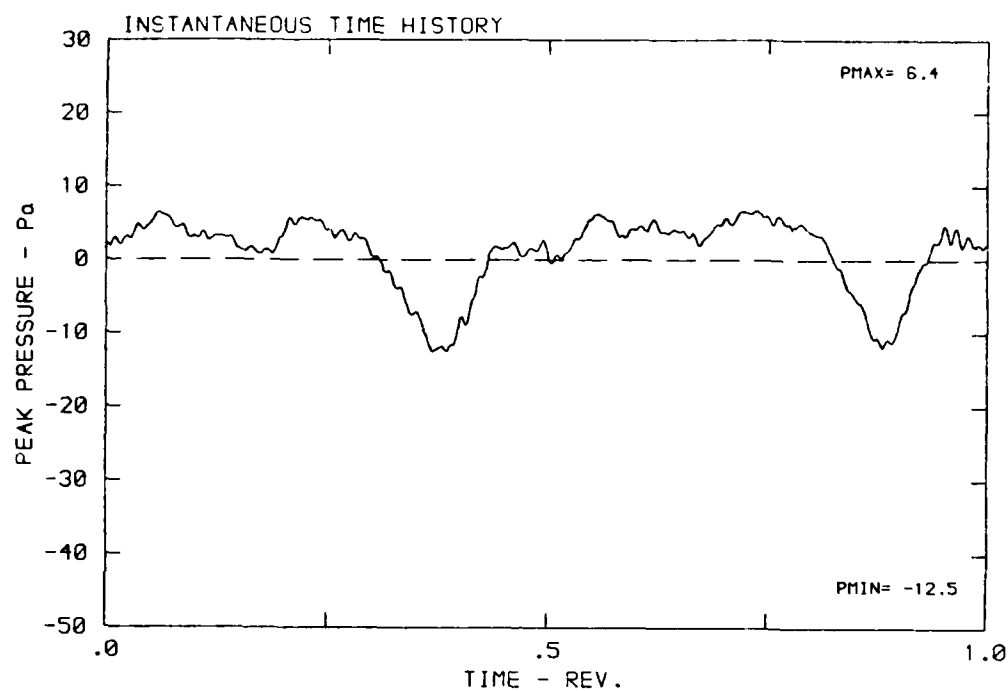
DATA POINT: GC-1 RUN: 142 MP: 9

β : 20.7° MH: .6753 n: 2100 rpm v/u : .232 ϕ : -7.4° T: 287.0 K



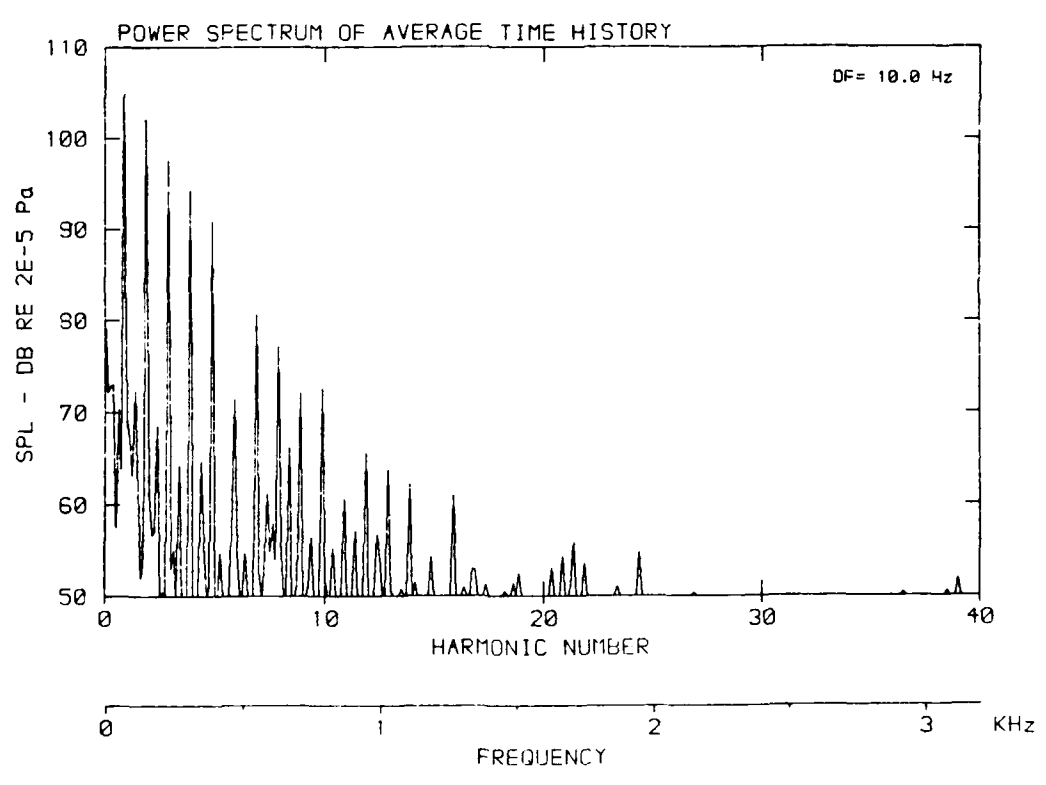
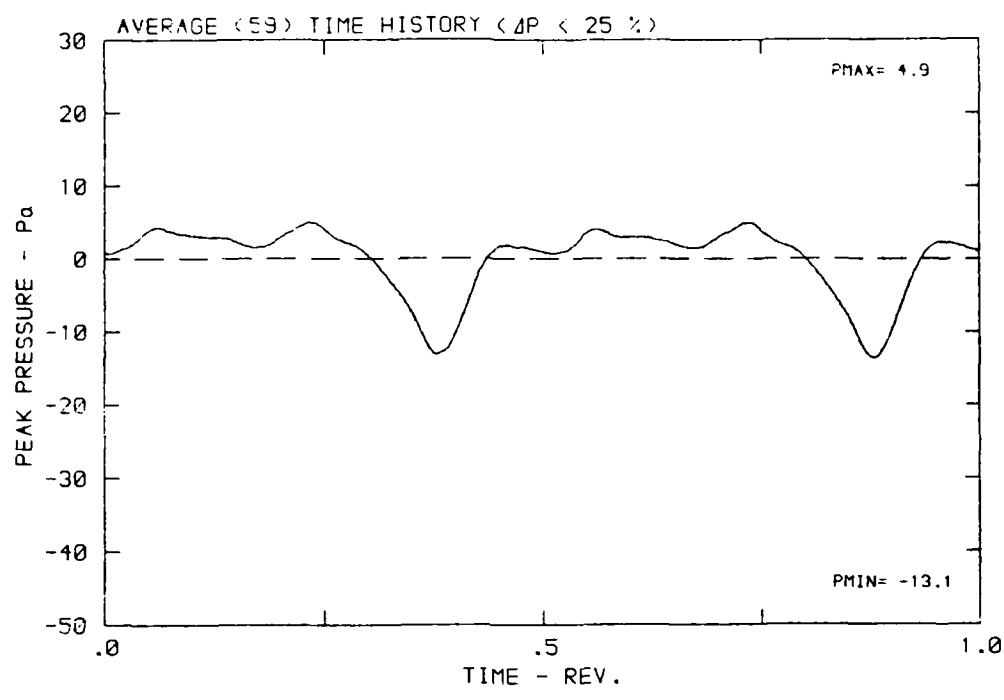
DATA POINT: GC-2 RUN: 143 MP: 1

β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° T: 287.6 K



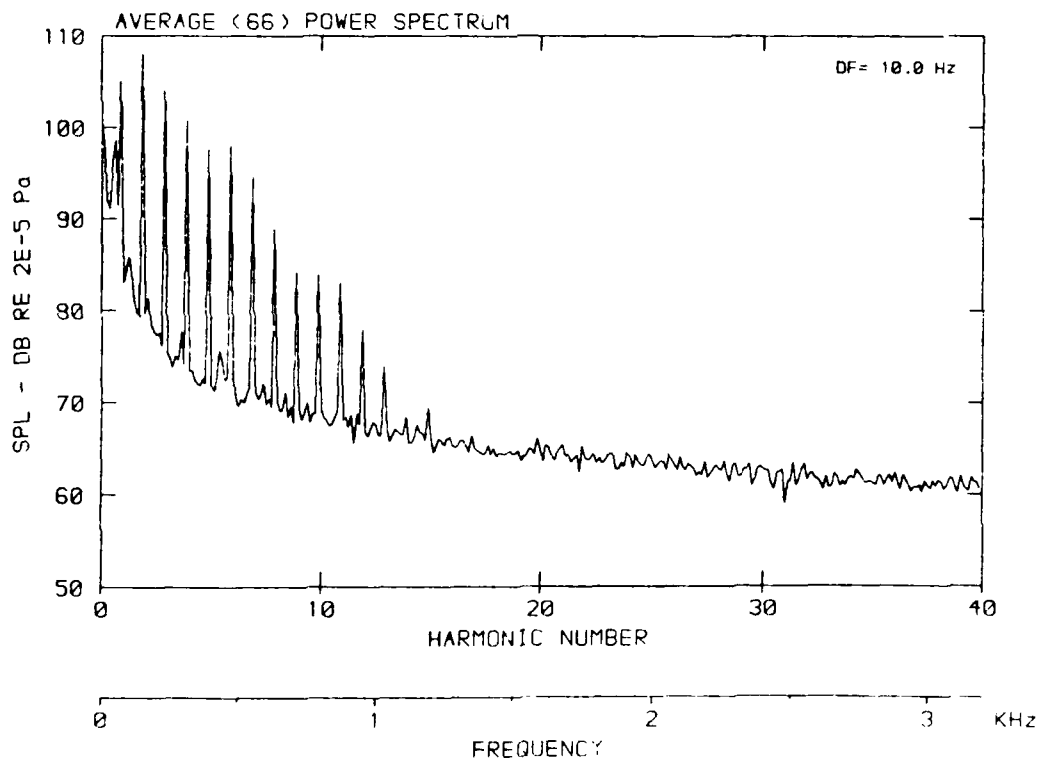
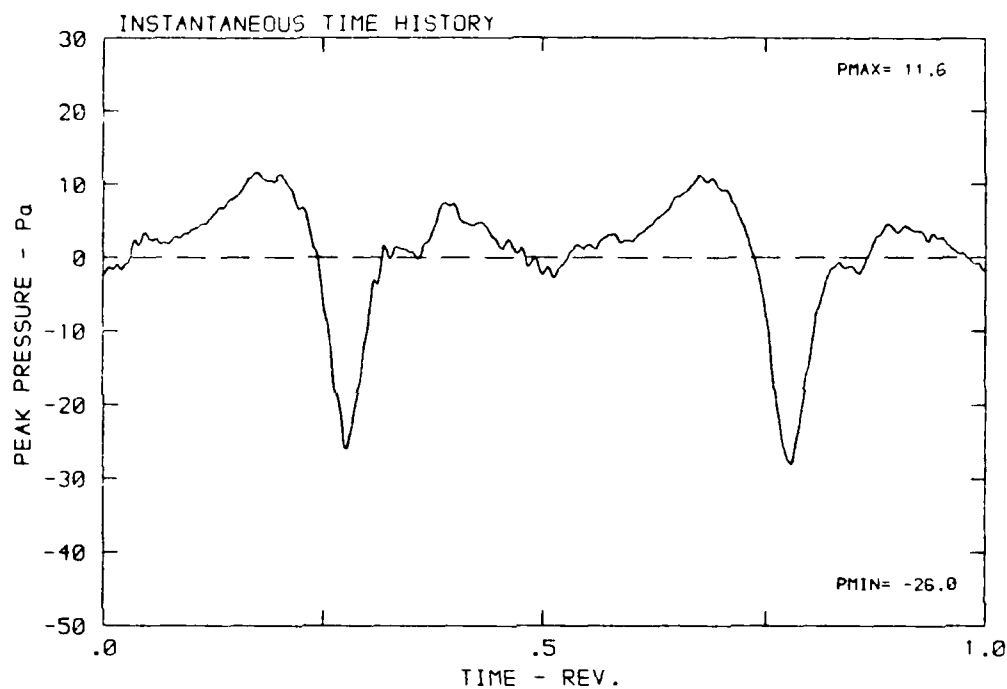
DATA POINT: GC-2 RUN: 143 MP: 1

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



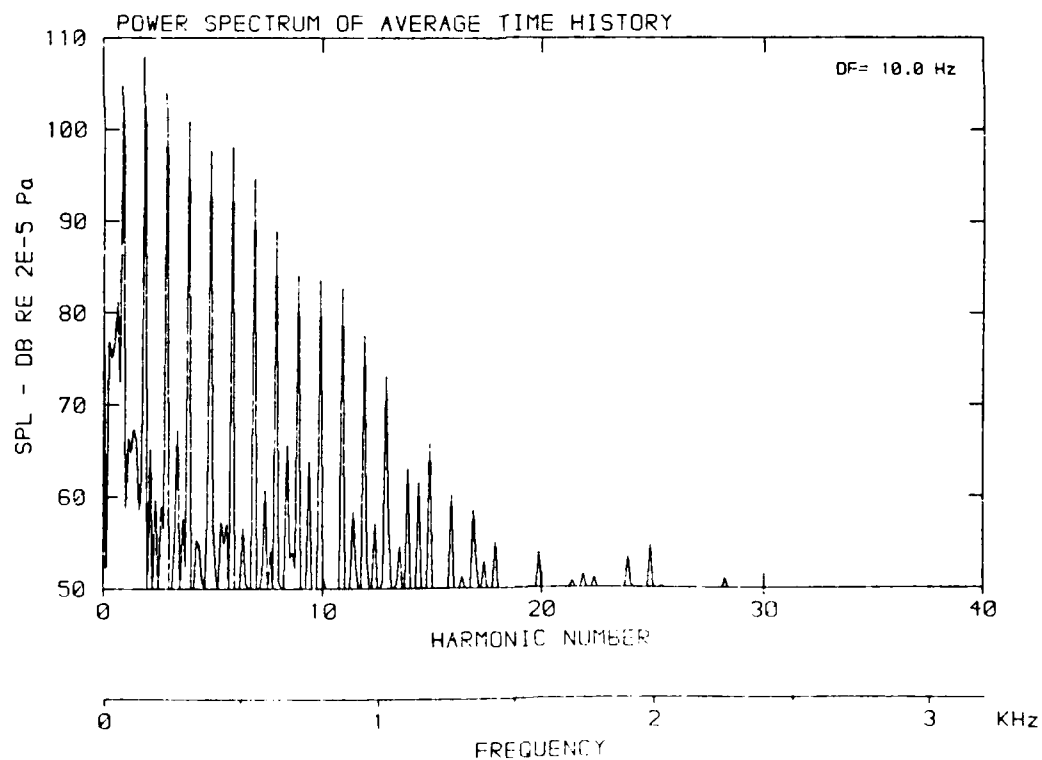
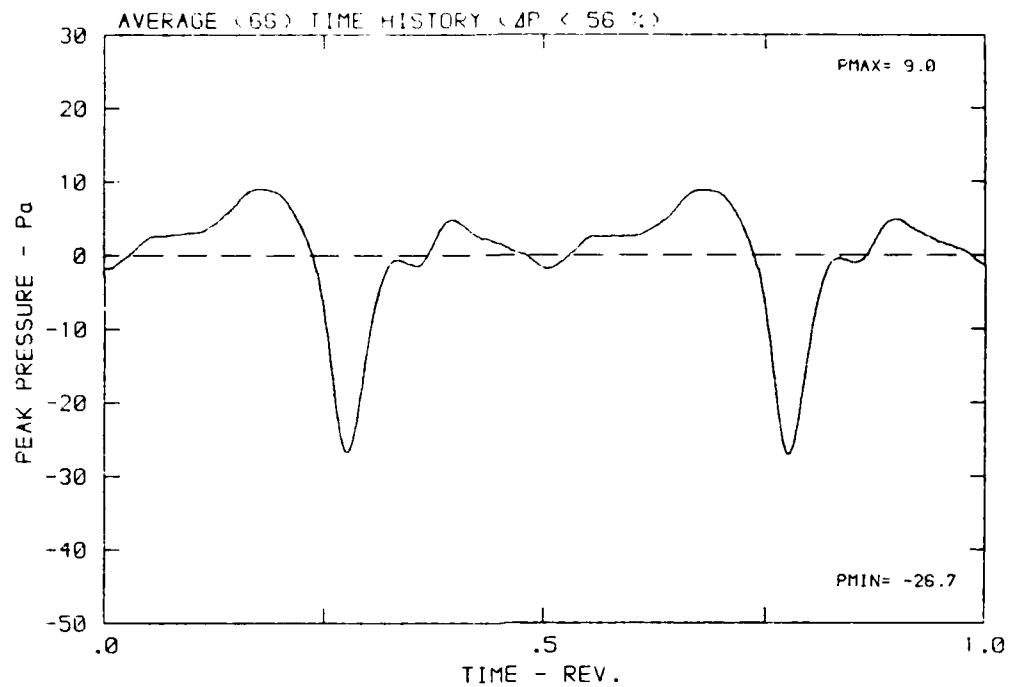
DATA POINT: GC-2 RUN: 143 MP: 2

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



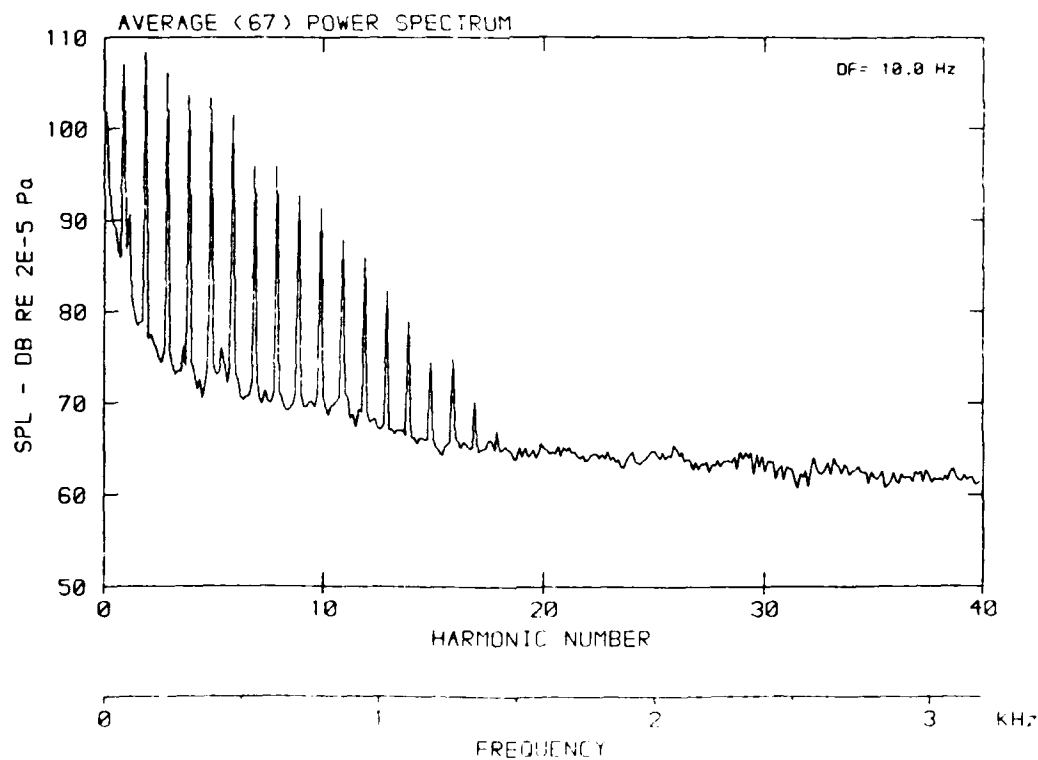
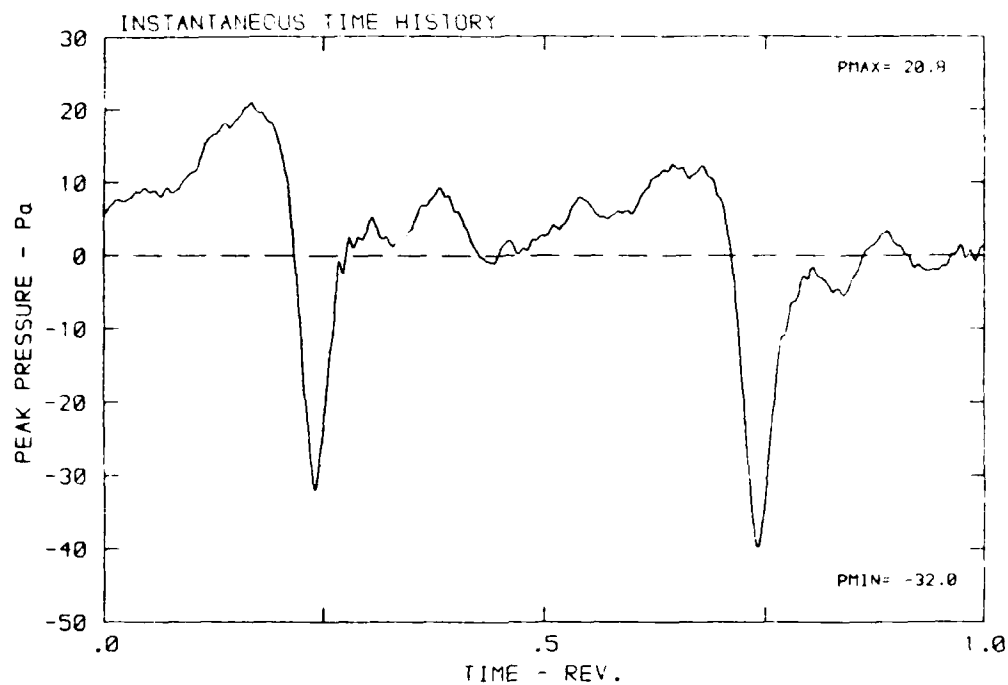
DATA POINT: GC-2 RUN: 143 MP: 2

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



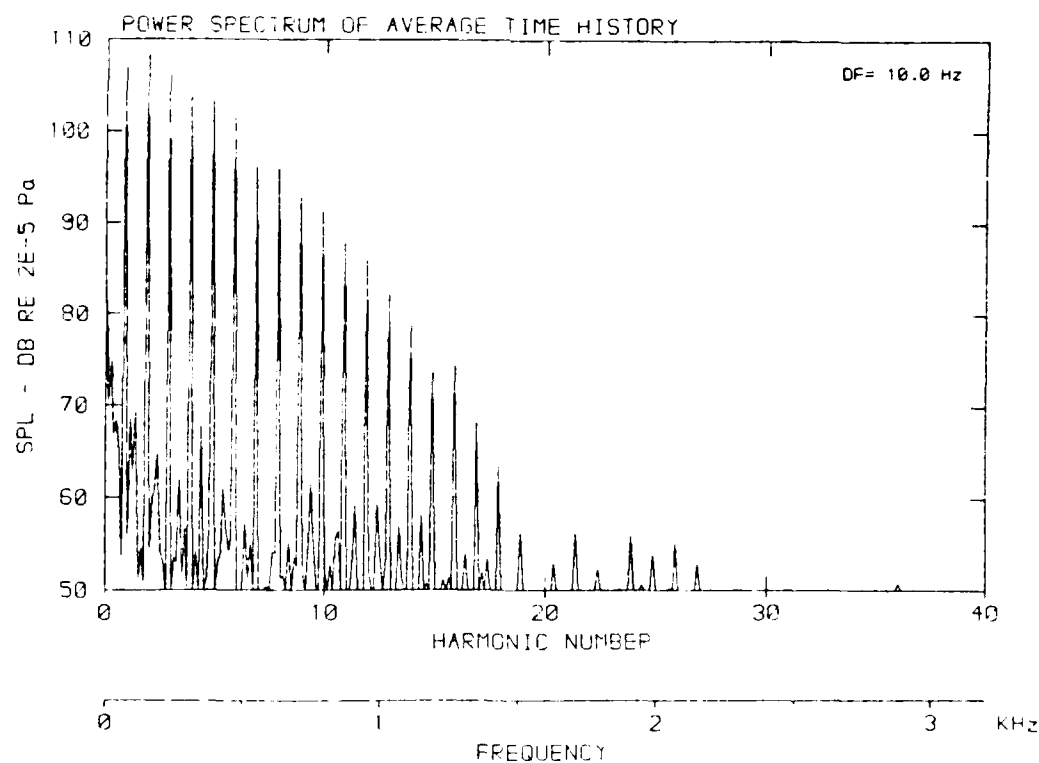
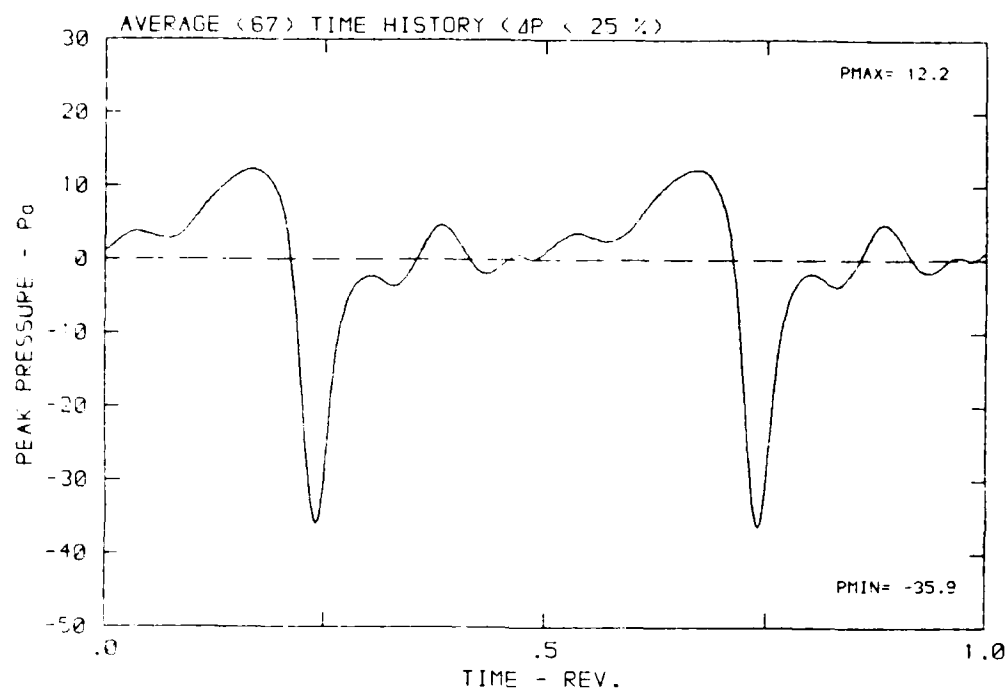
DATA POINT: GC-2 RUN: 143 MP: 3

β : 20.7° MH: .7664 n: 2400 rpm vru: .204 ϕ : -7.4° T: 287.6 K



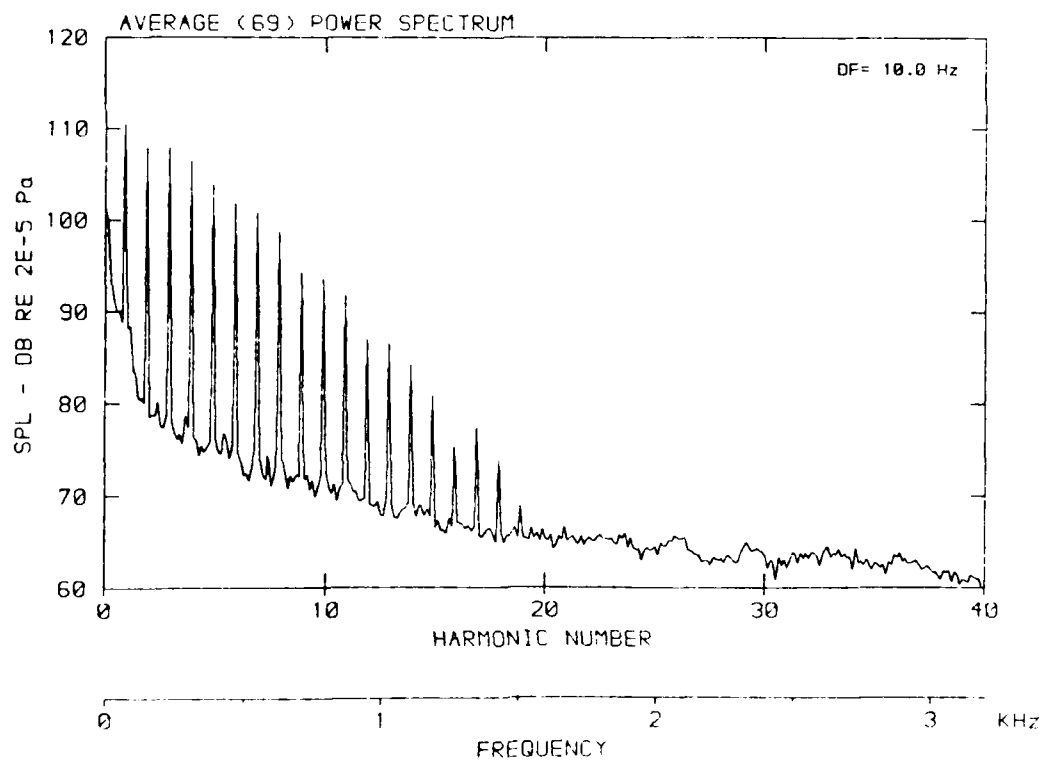
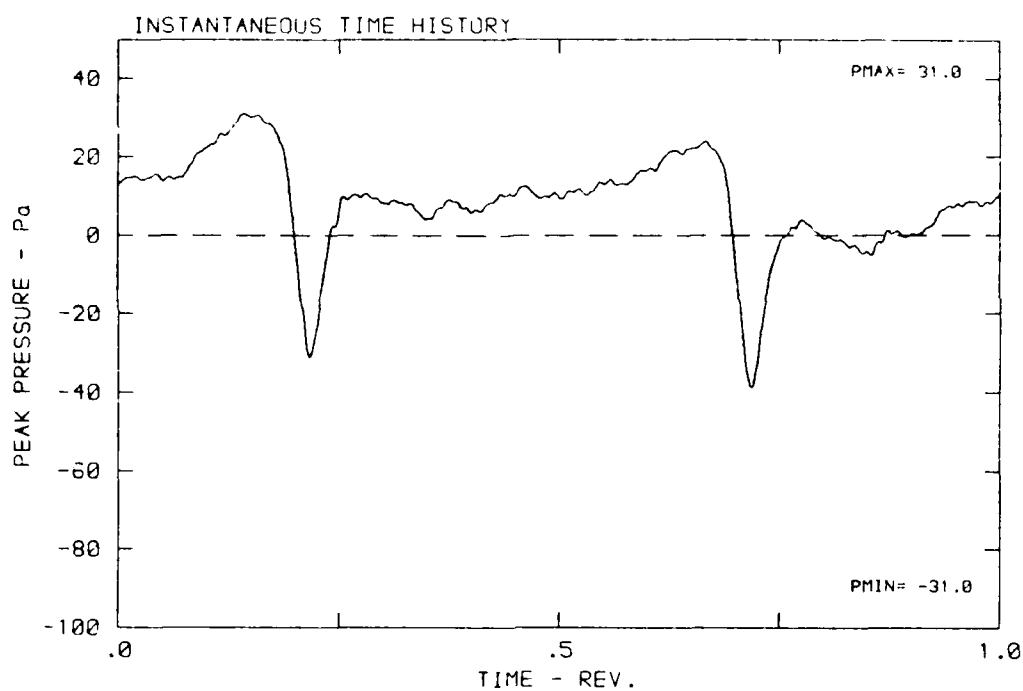
DATA POINT: GC-2 RUN: 143 MP: 3

β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° T: 287.6 K



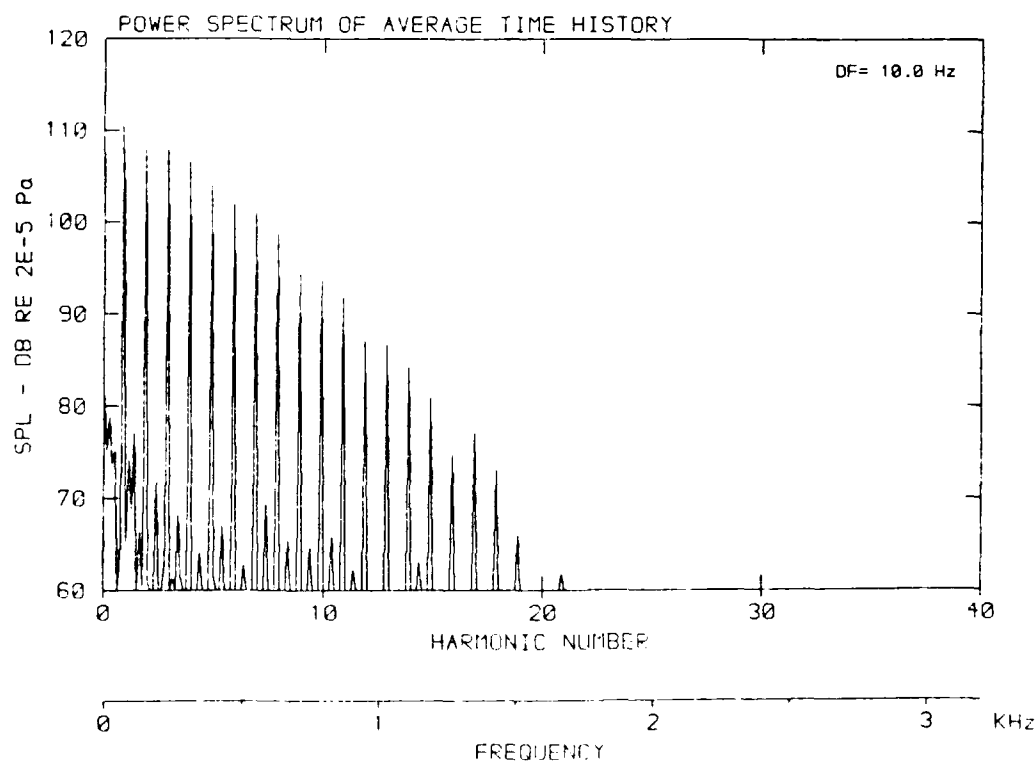
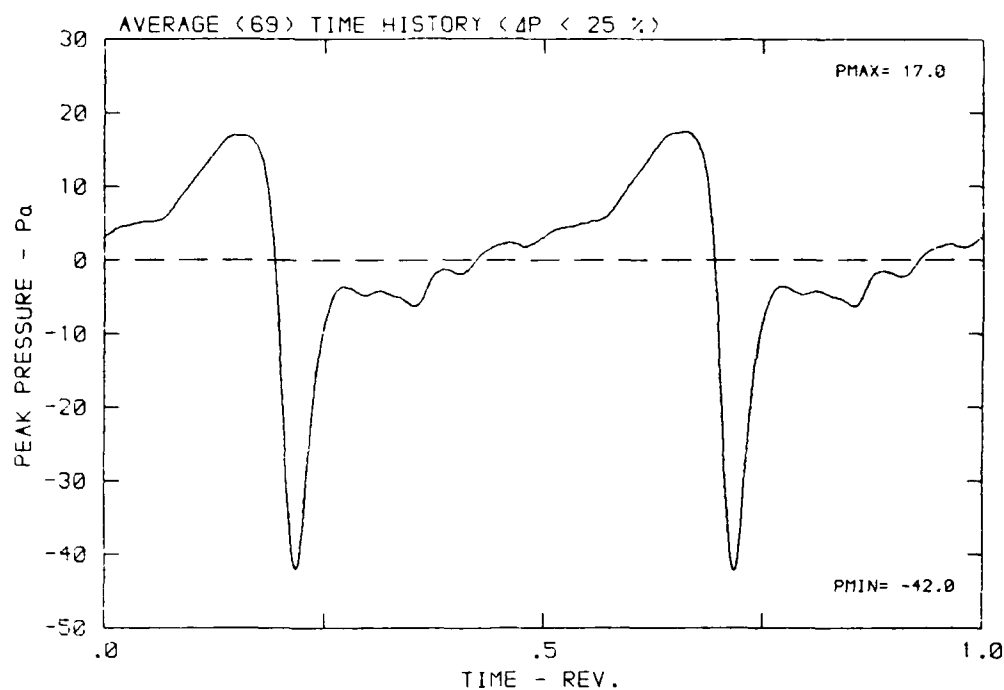
DATA POINT: GC-2 RUN: 143 MP: 4

β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° T: 297.6 K



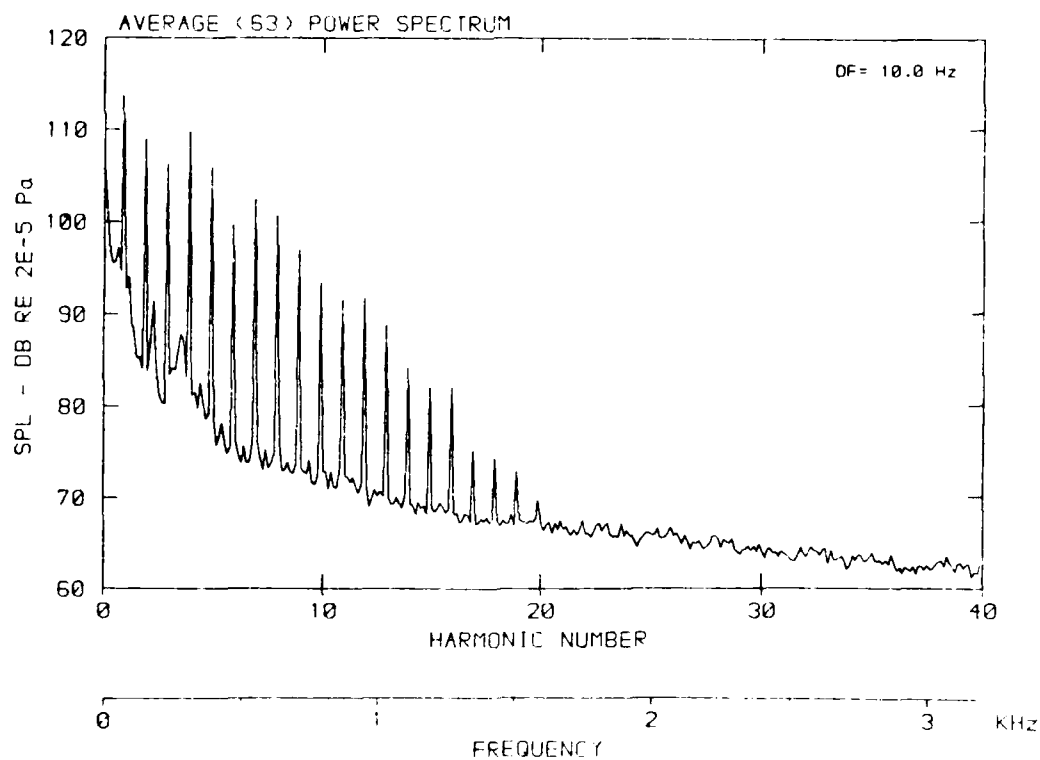
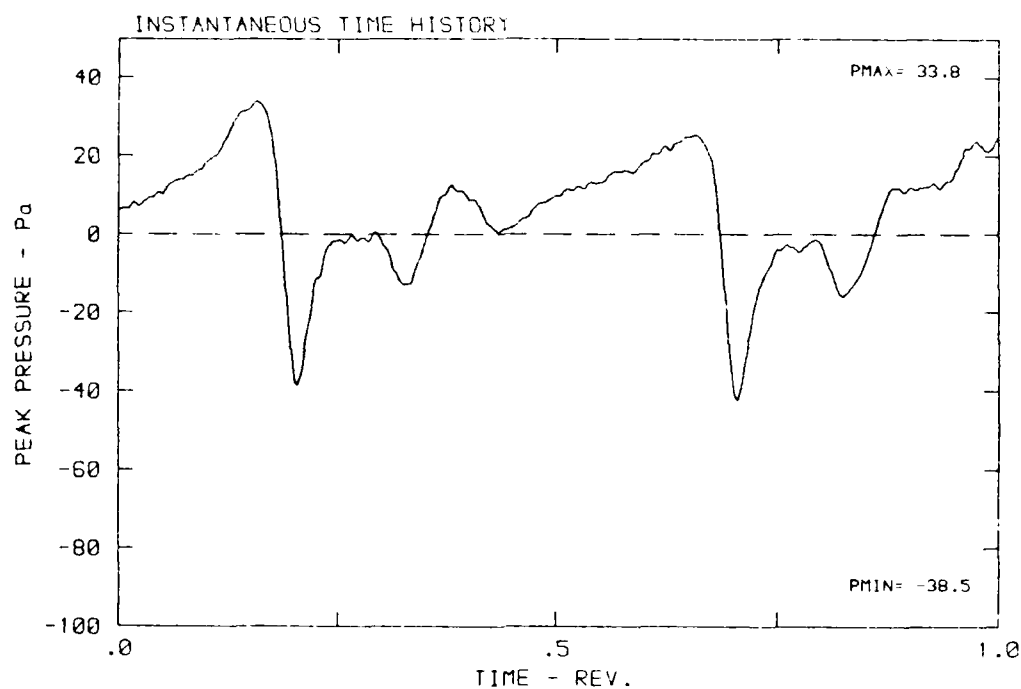
DATA POINT: GC-2 RUN: 143 MP: 4

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



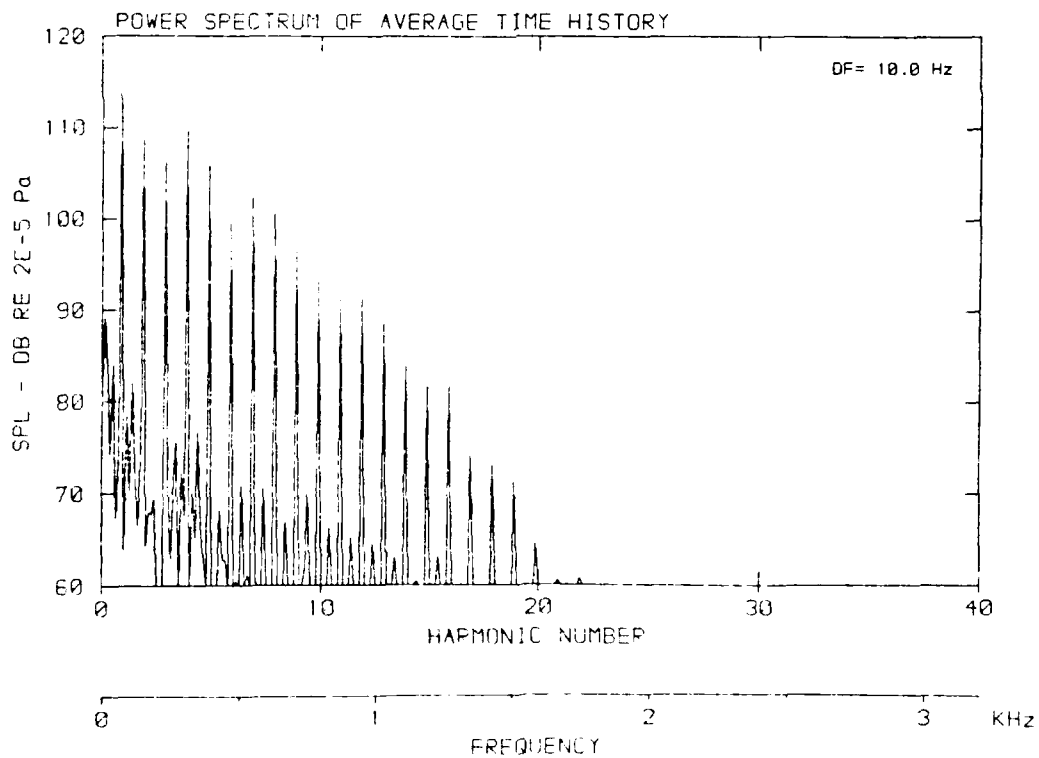
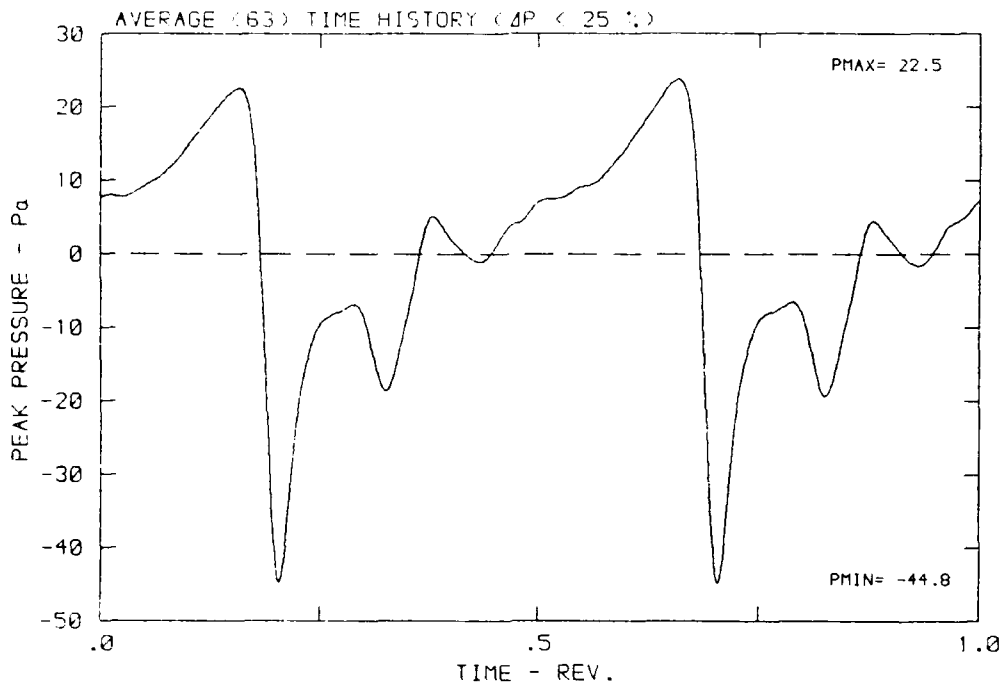
DATA POINT: GC-2 RUN: 143 MP: 5

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



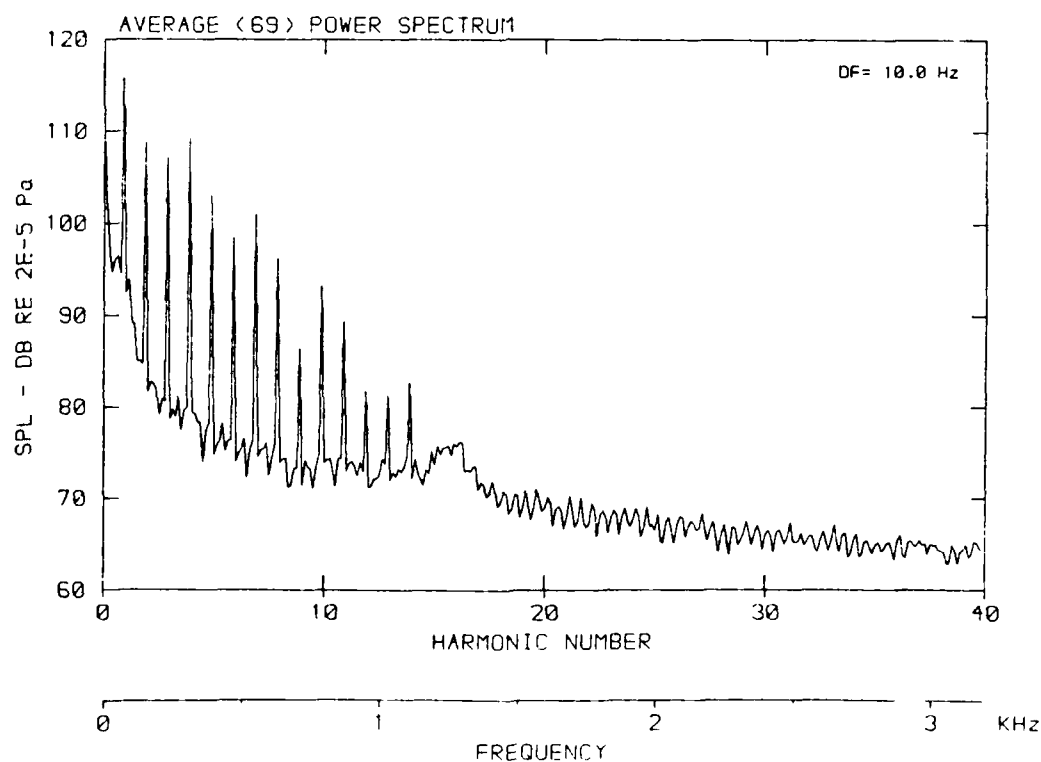
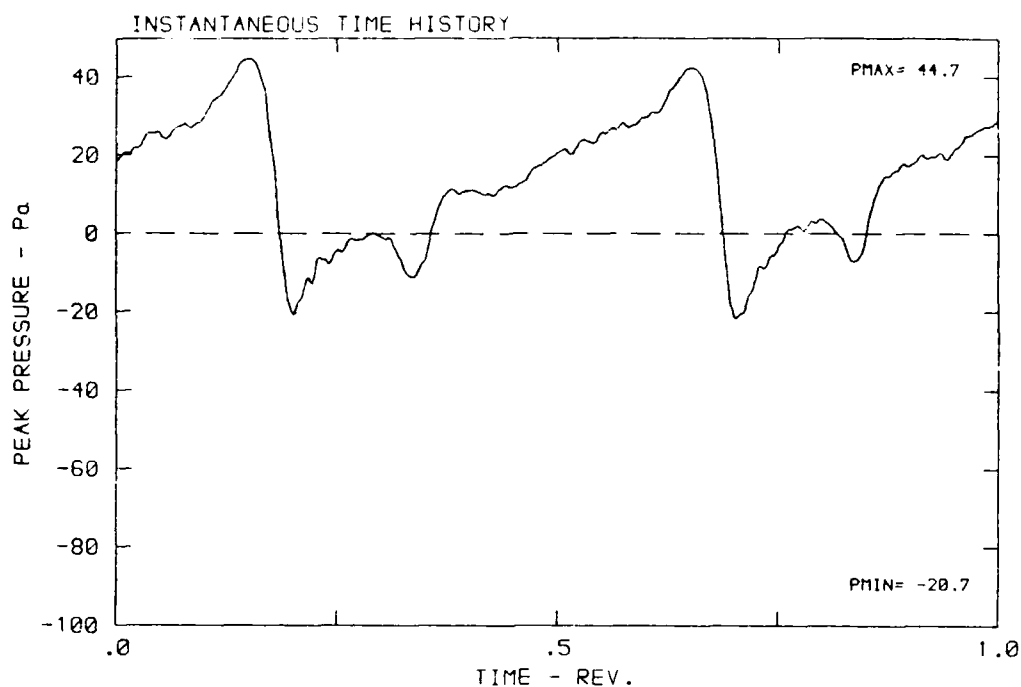
DATA POINT: GC-2 RUN: 143 MP: 5

β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° T: 287.6 K



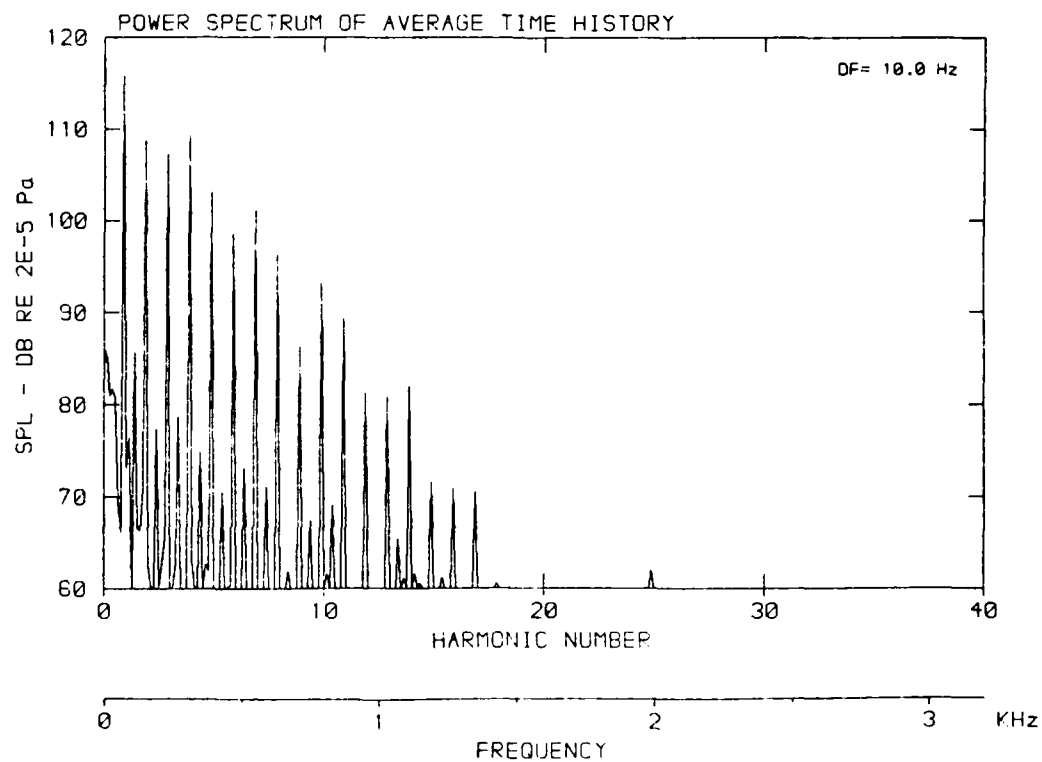
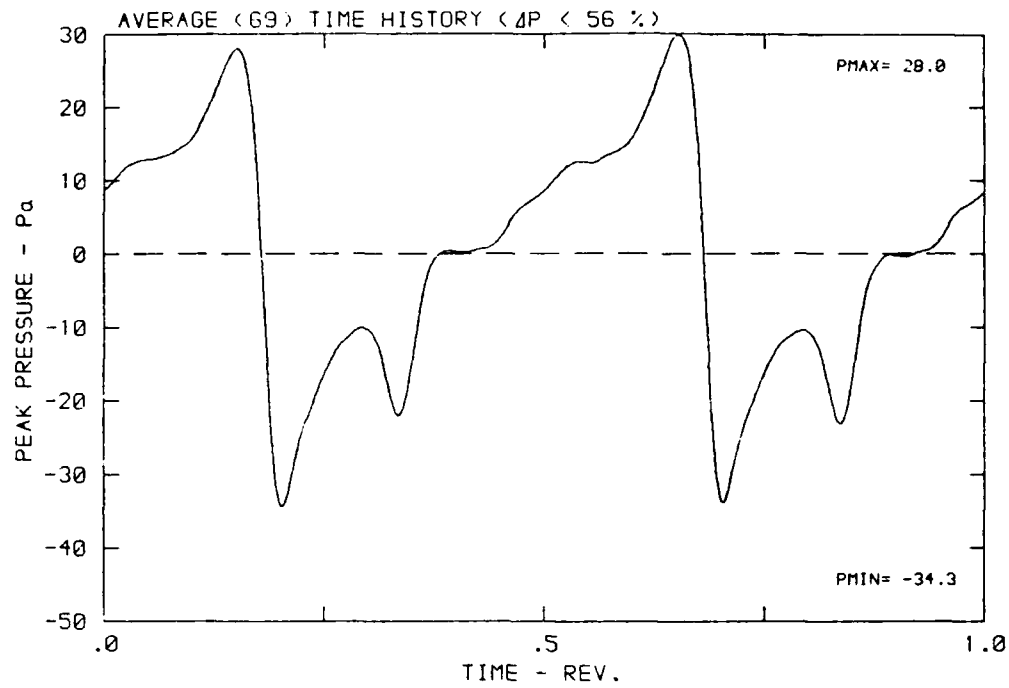
DATA POINT: GC-2 RUN: 143 MP: 6

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



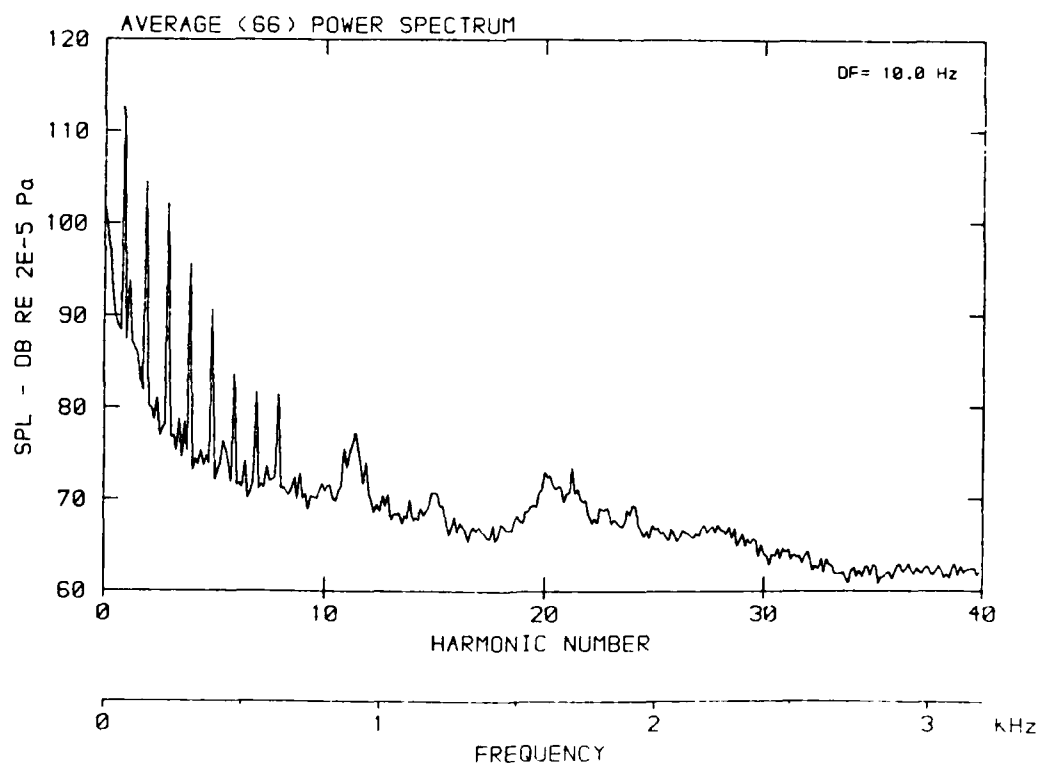
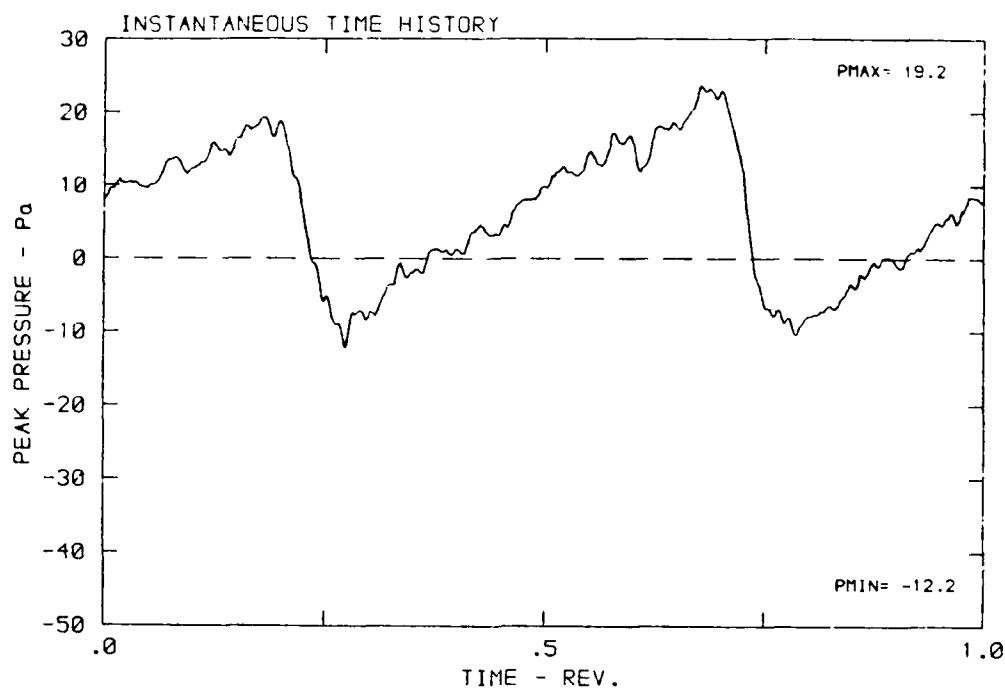
DATA POINT: GC-2 RUN: 143 MP: 6

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



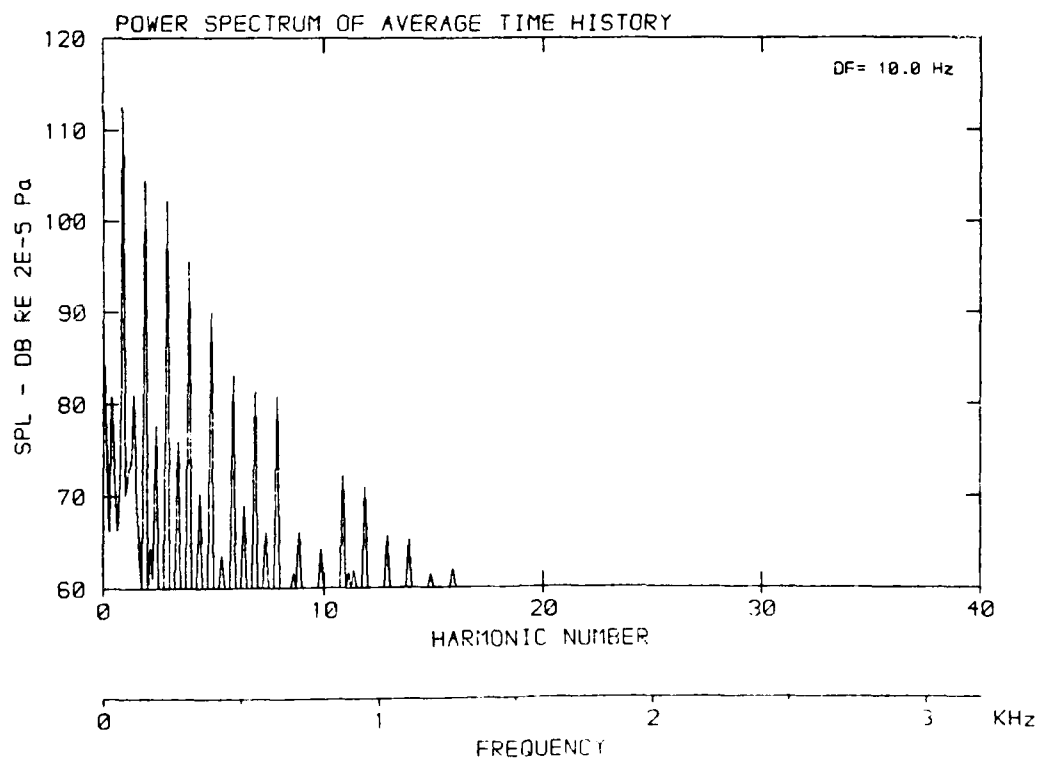
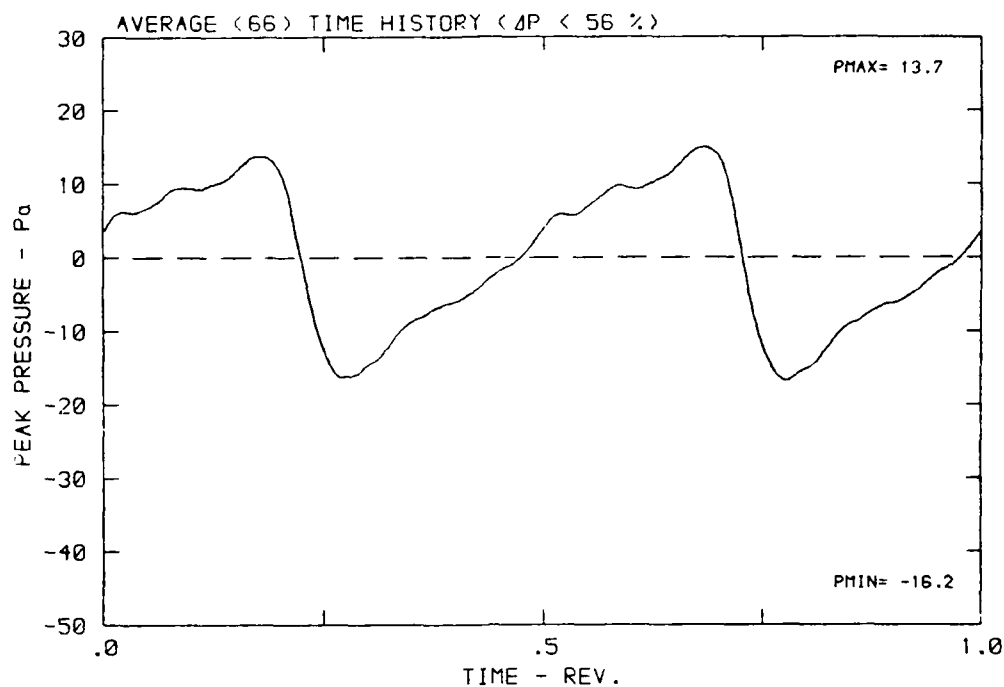
DATA POINT: GC-2 RUN: 143 MP: 7

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



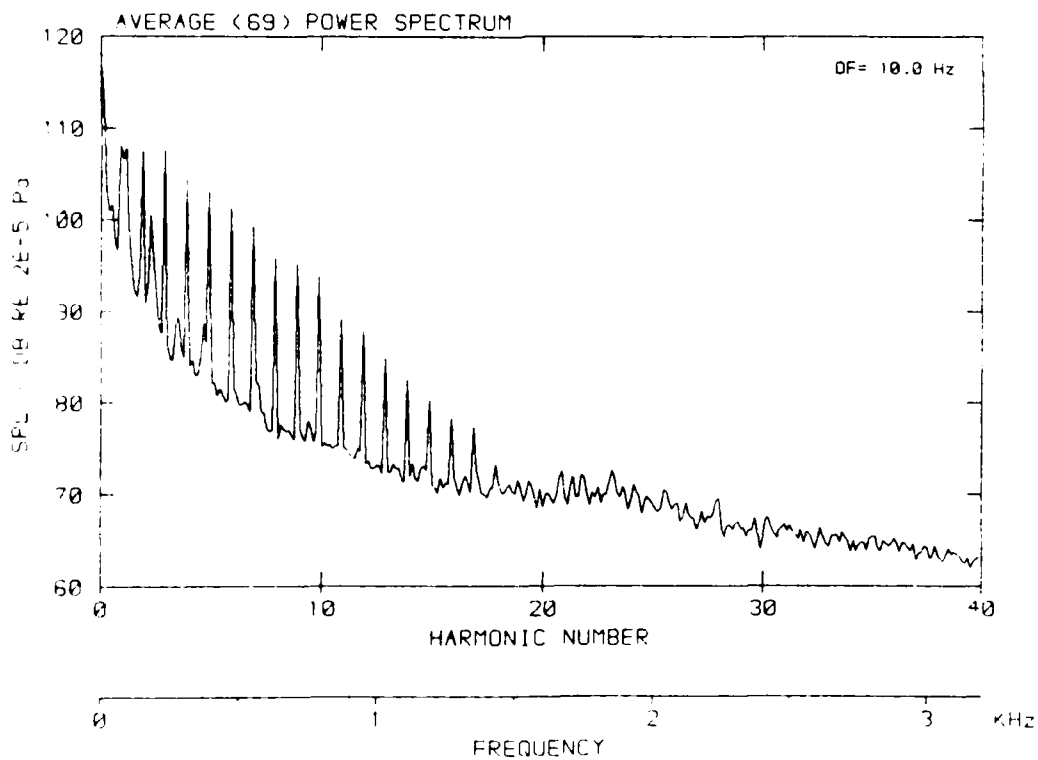
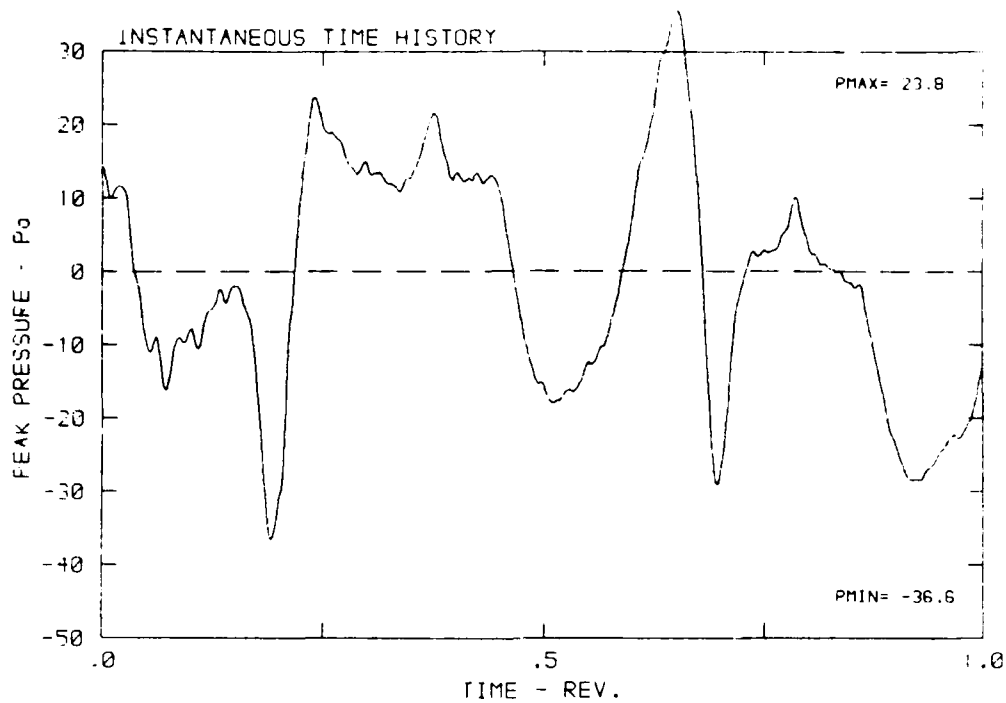
DATA POINT: GC-2 RUN: 143 MP: 7

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K



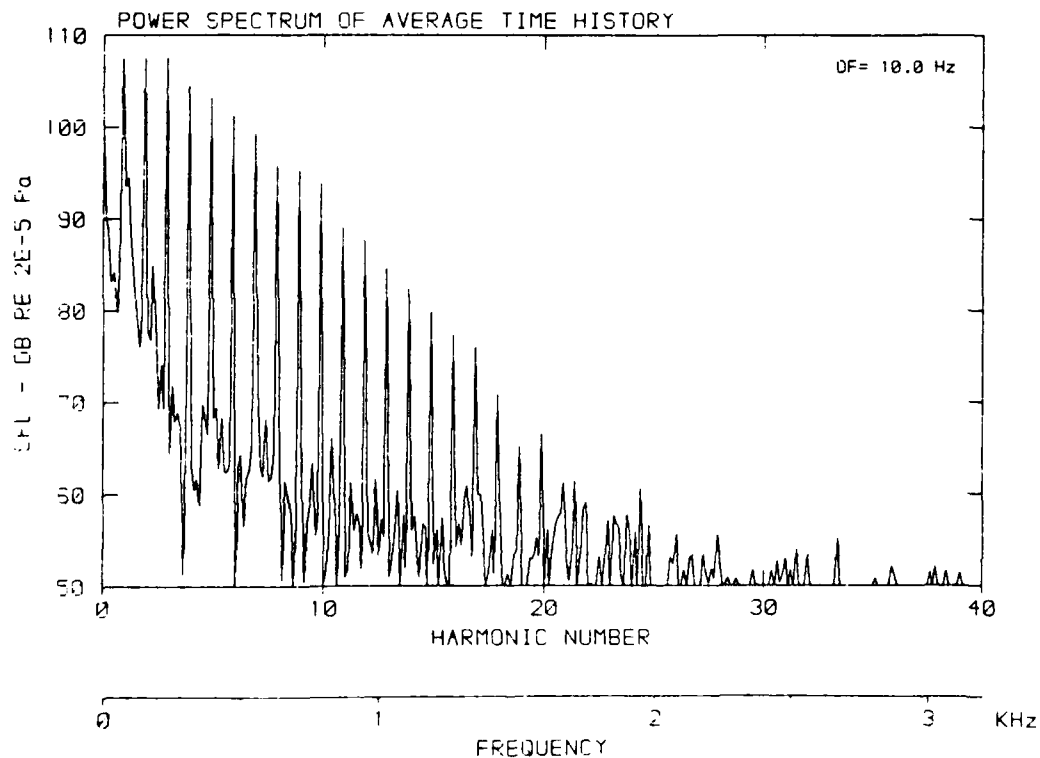
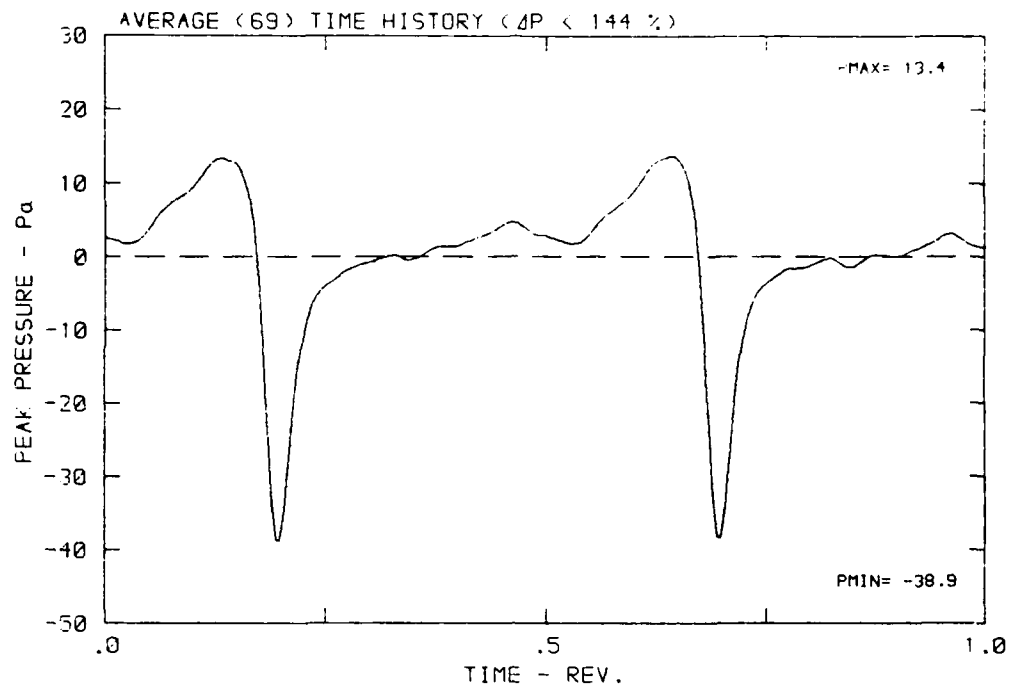
DATA POINT: GC-2 RUN: 143 MP: 8

β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° T: 287.5 s

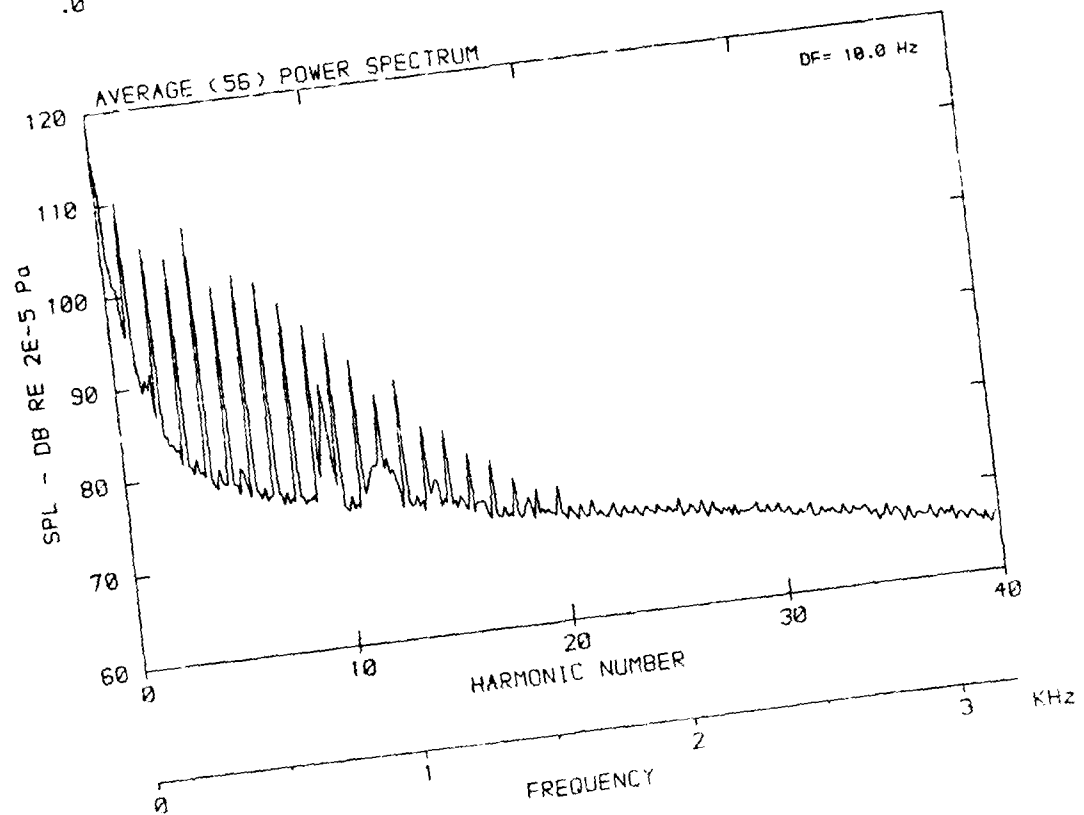
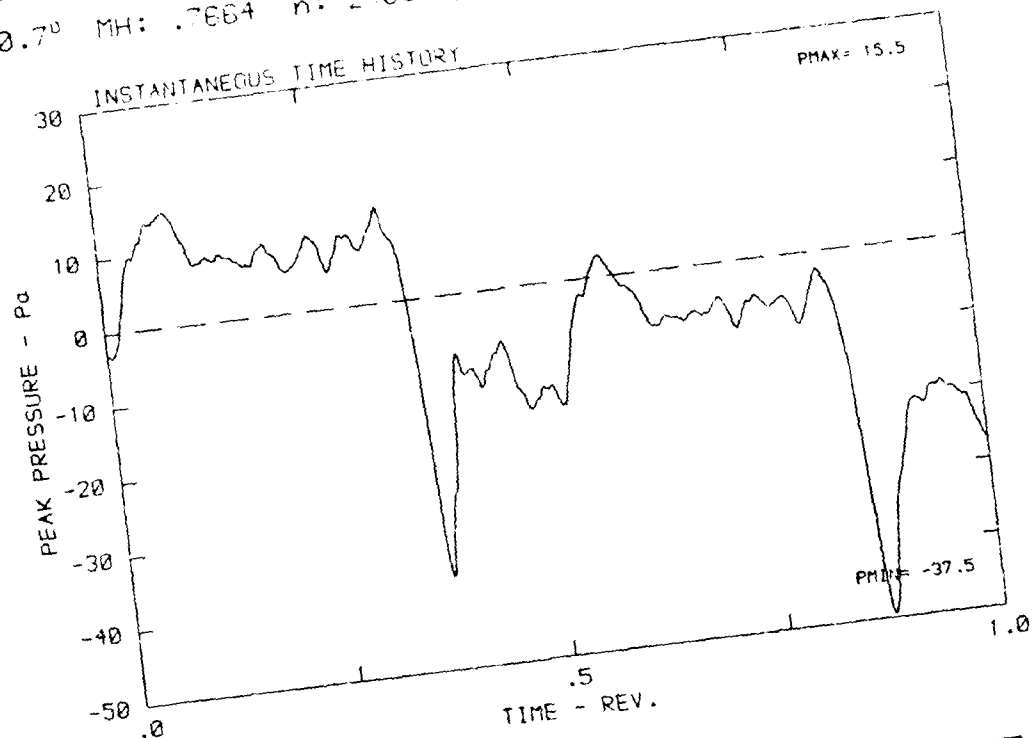


DATA POINT: GC-2 RUN: 143 MP: 8

β : 20.7° MH: .7664 n: 2400 rpm v/u: .204 ϕ : -7.4° T: 287.6 K

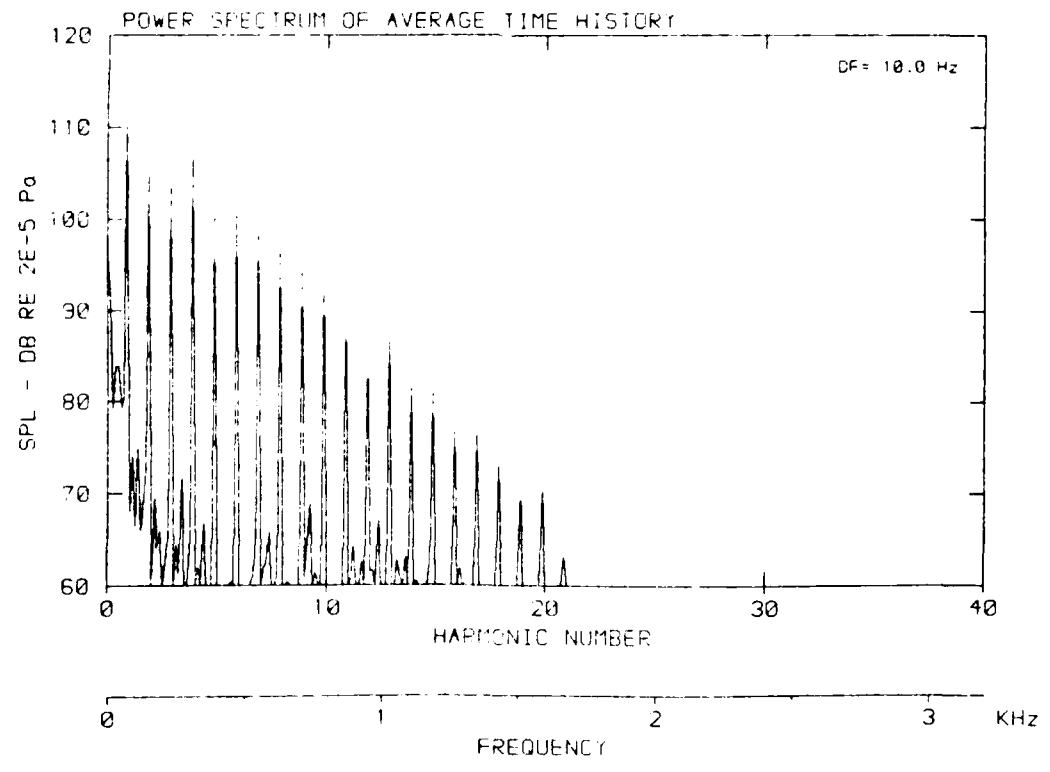
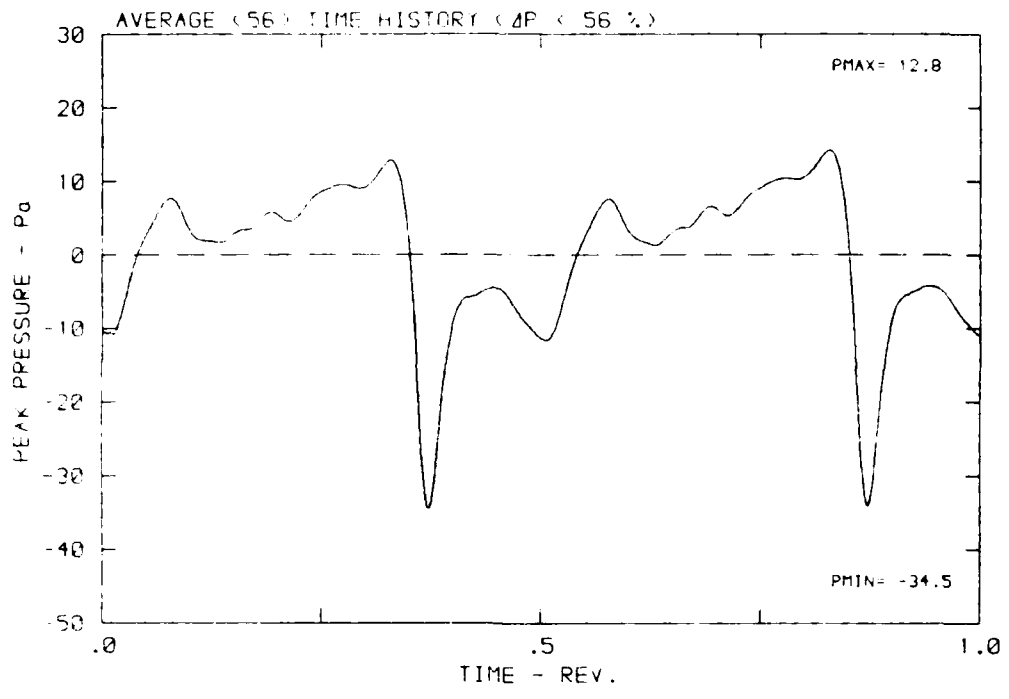


DATA POINT: GC-2 RUN: 143 MF: 9
 β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° τ : 297.6°



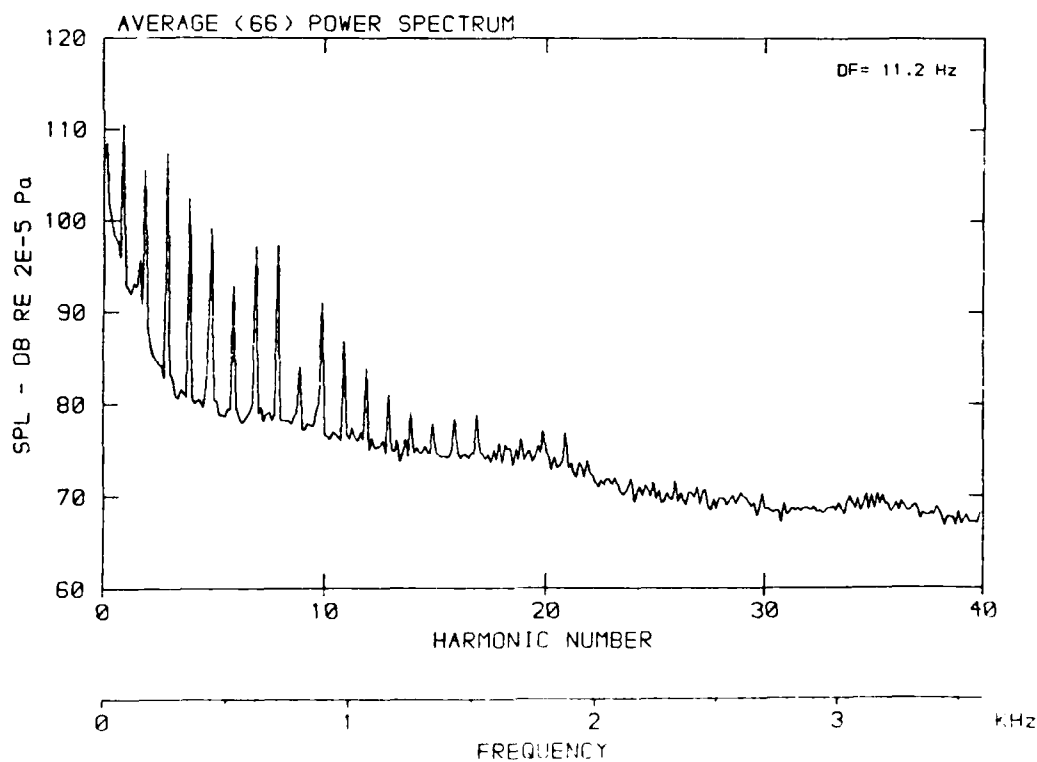
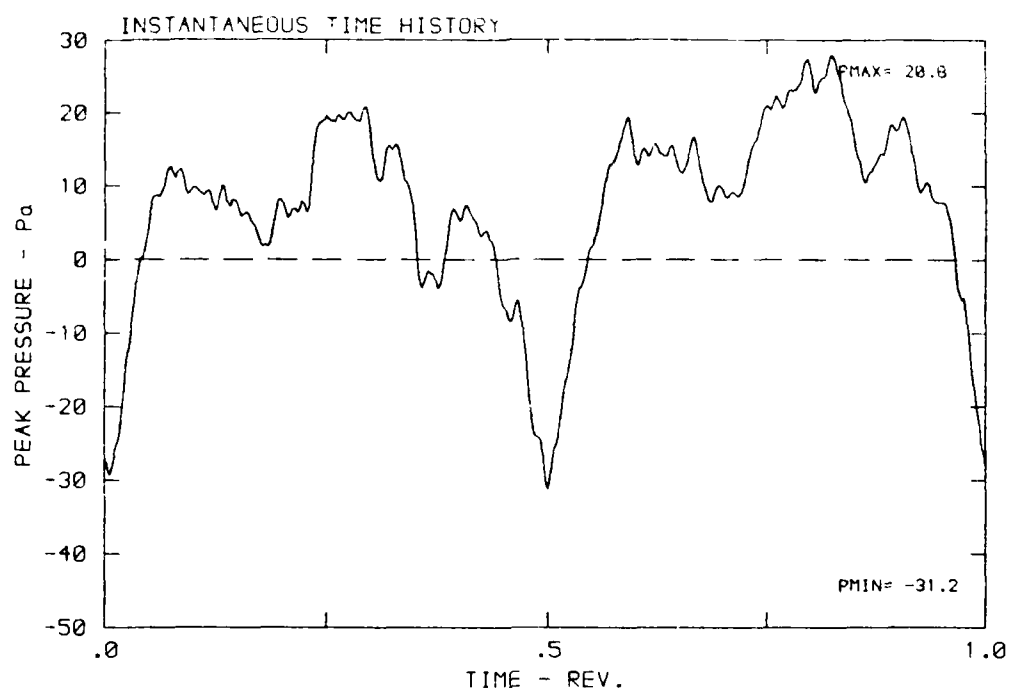
DATA POINT: GC-2 RUN: 143 MP: 9

β : 20.7° MH: .7664 n: 2400 rpm v/u : .204 ϕ : -7.4° T: 287.6 K



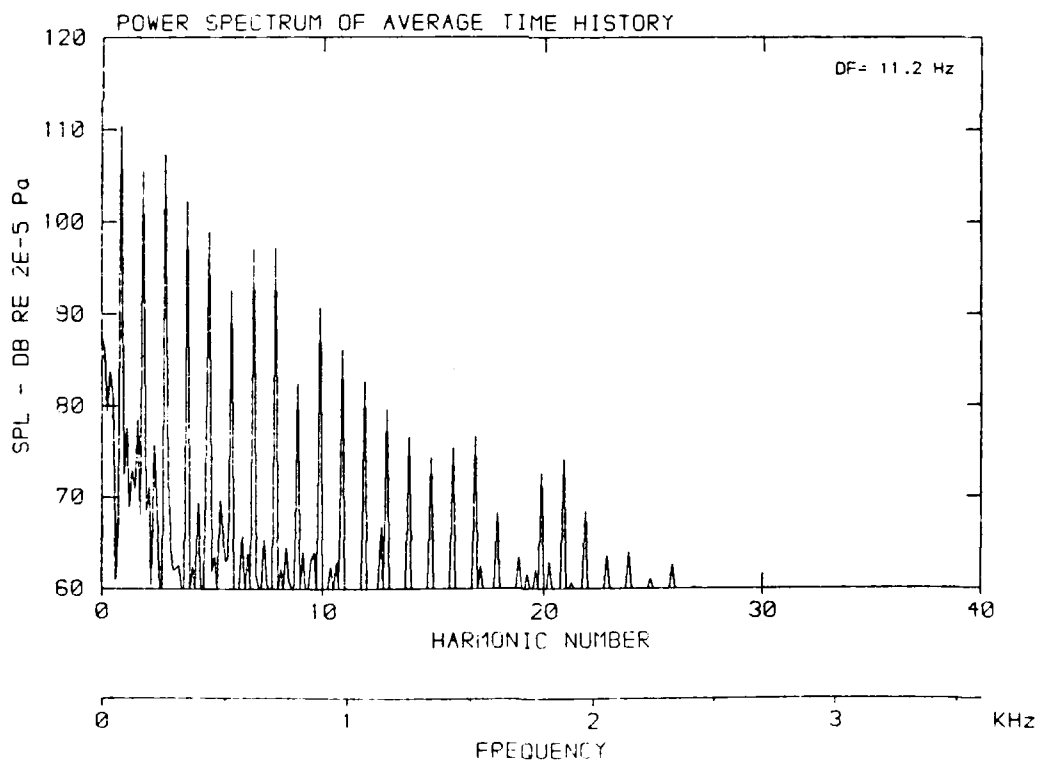
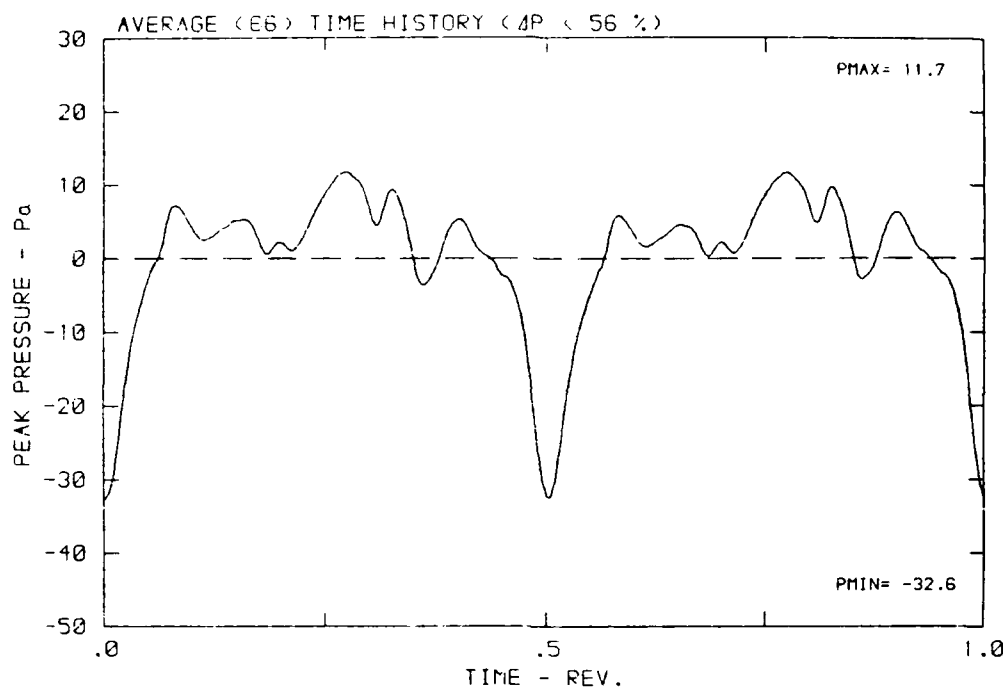
DATA POINT: GC-3 RUN: 144 MP: 1

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



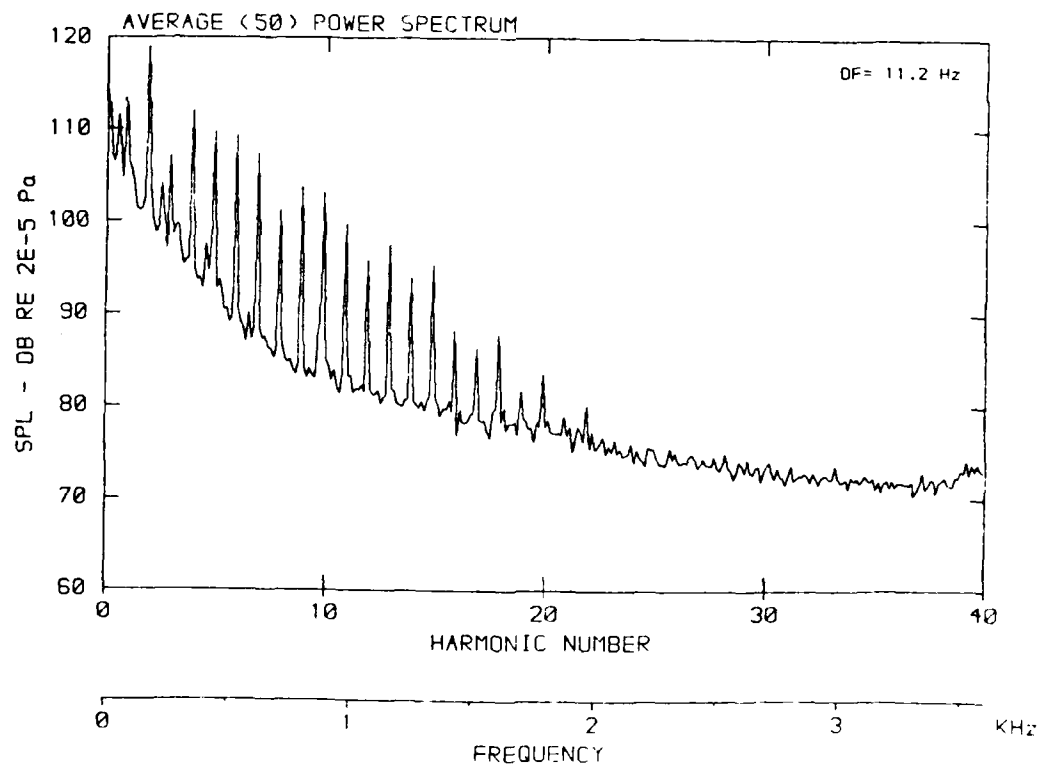
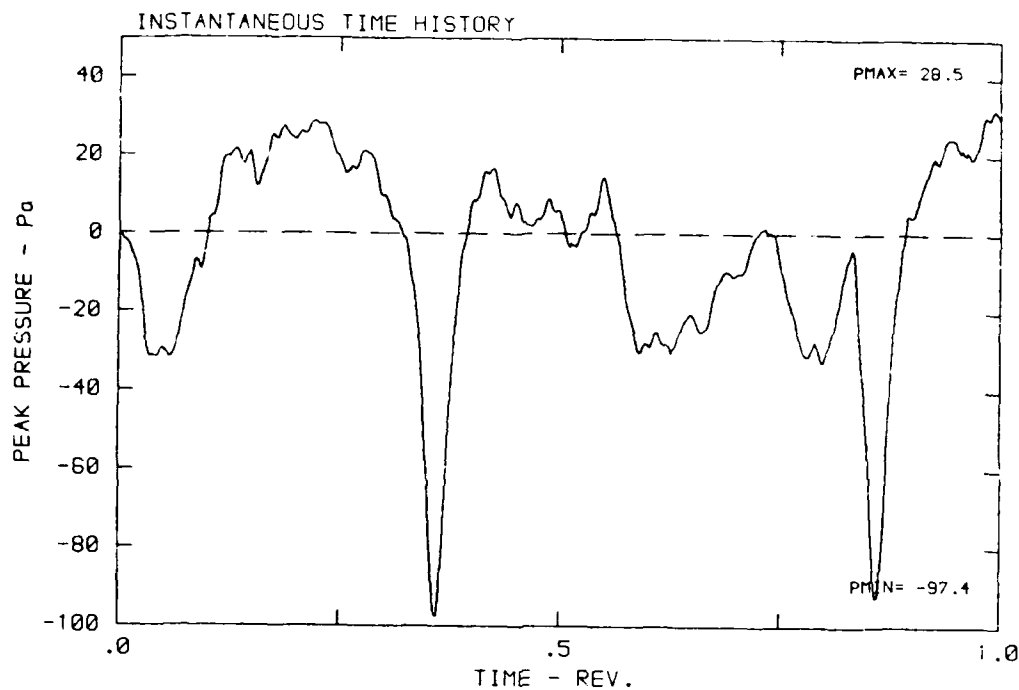
DATA POINT: GC-3 RUN: 144 MP: 1

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



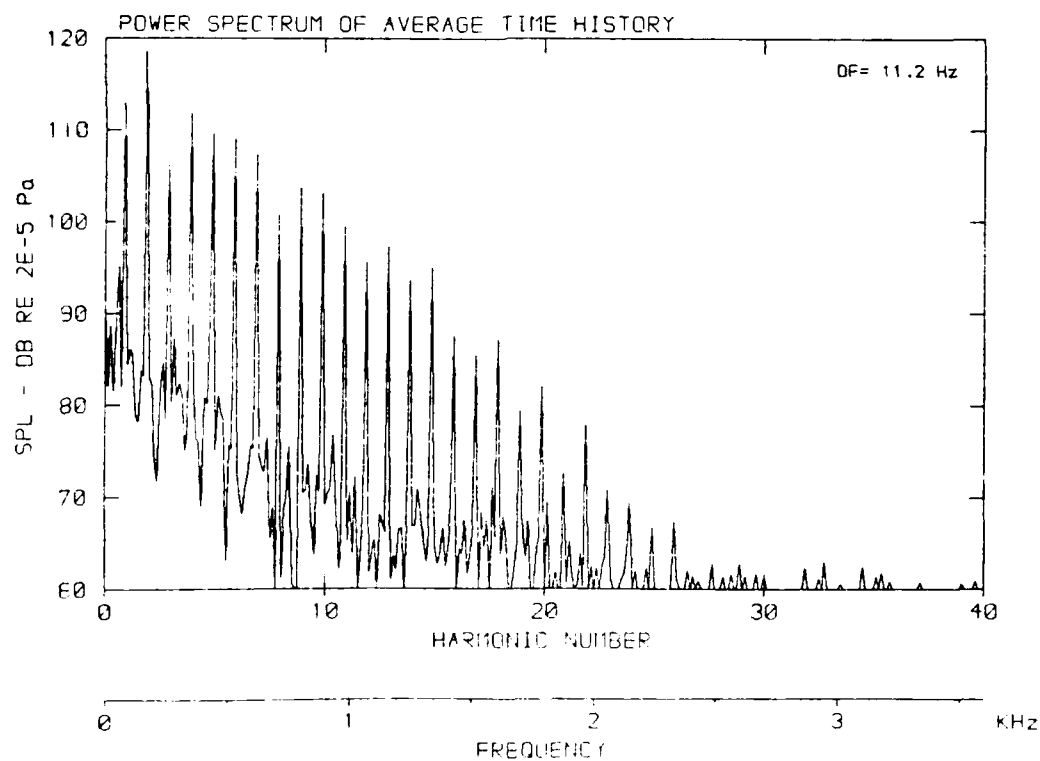
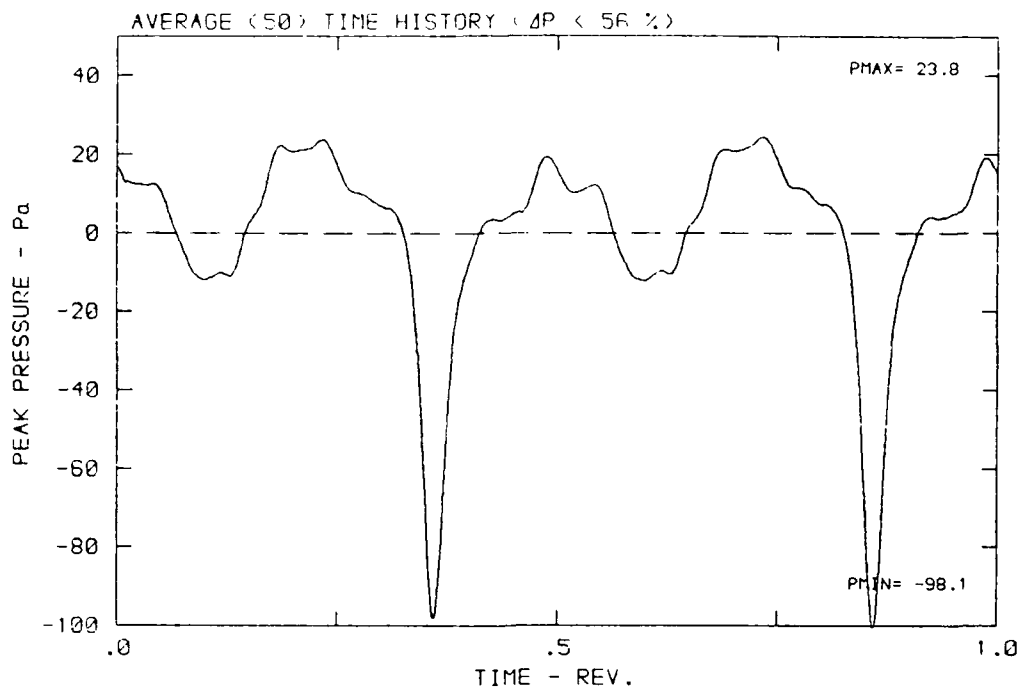
DATA POINT: GC-3 RUN: 144 MP: 2

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



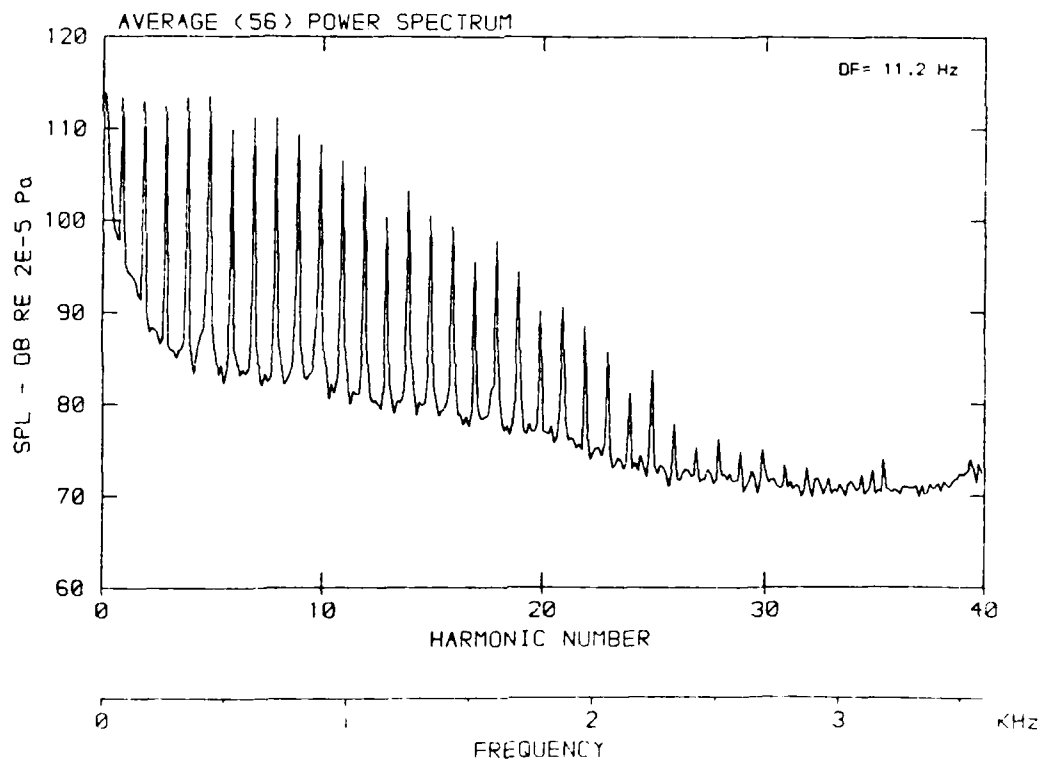
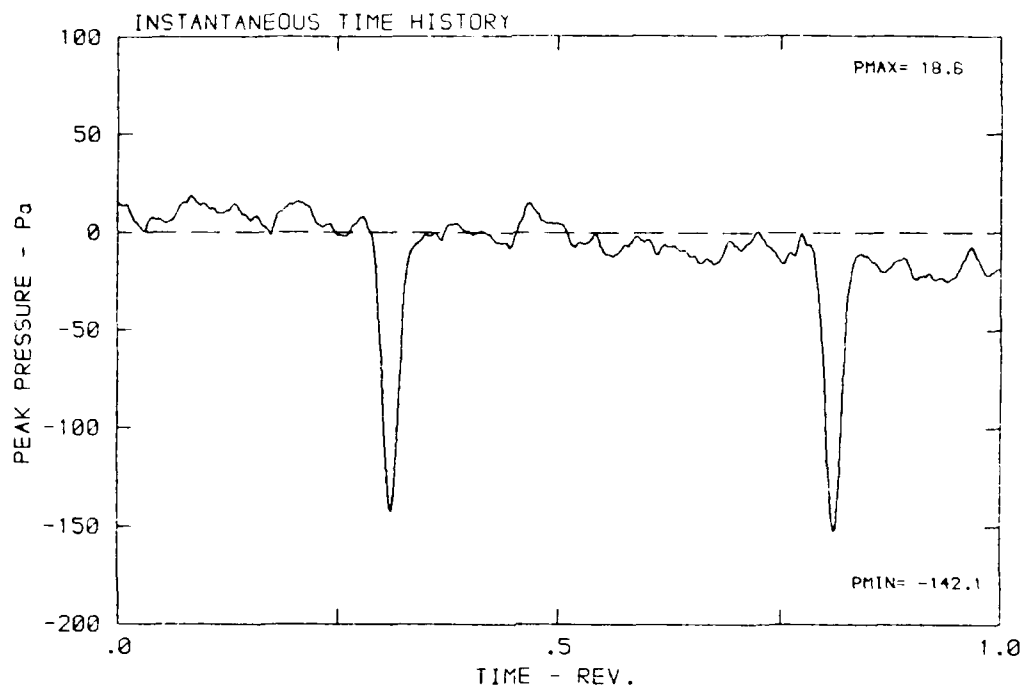
DATA POINT: GC-3 RUN: 144 MP: 2

β : 20.7° MH: .8741 n: 2700 rpm v/u : .269 ϕ : -7.4° T: 288.2 K



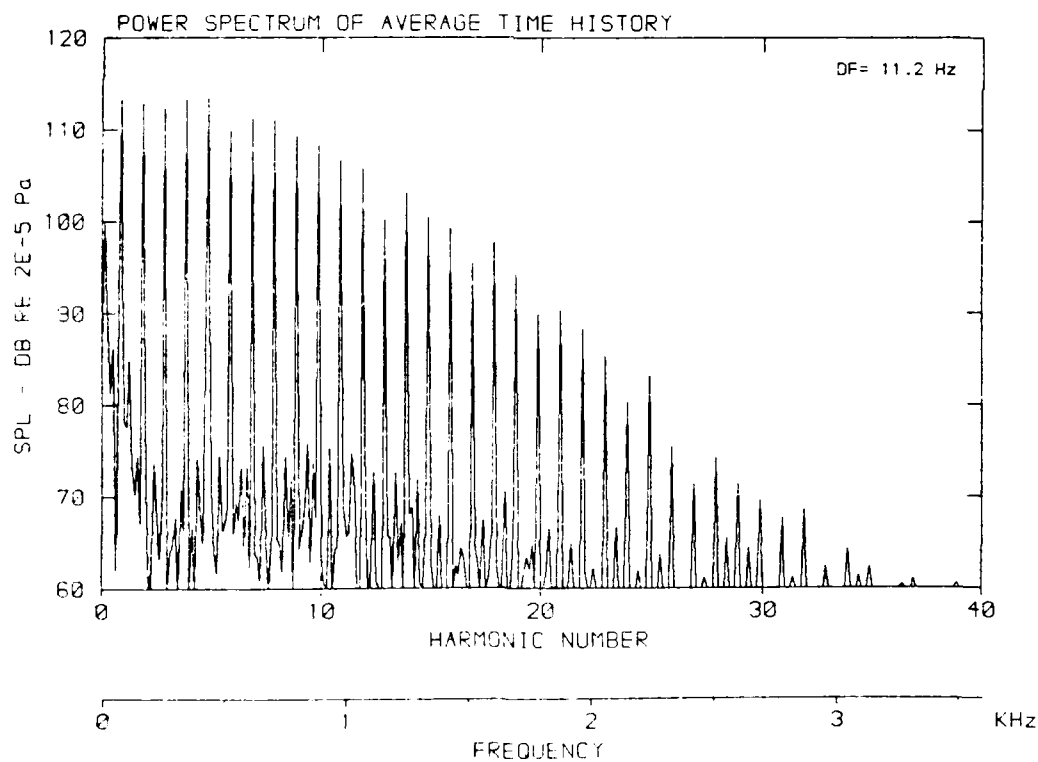
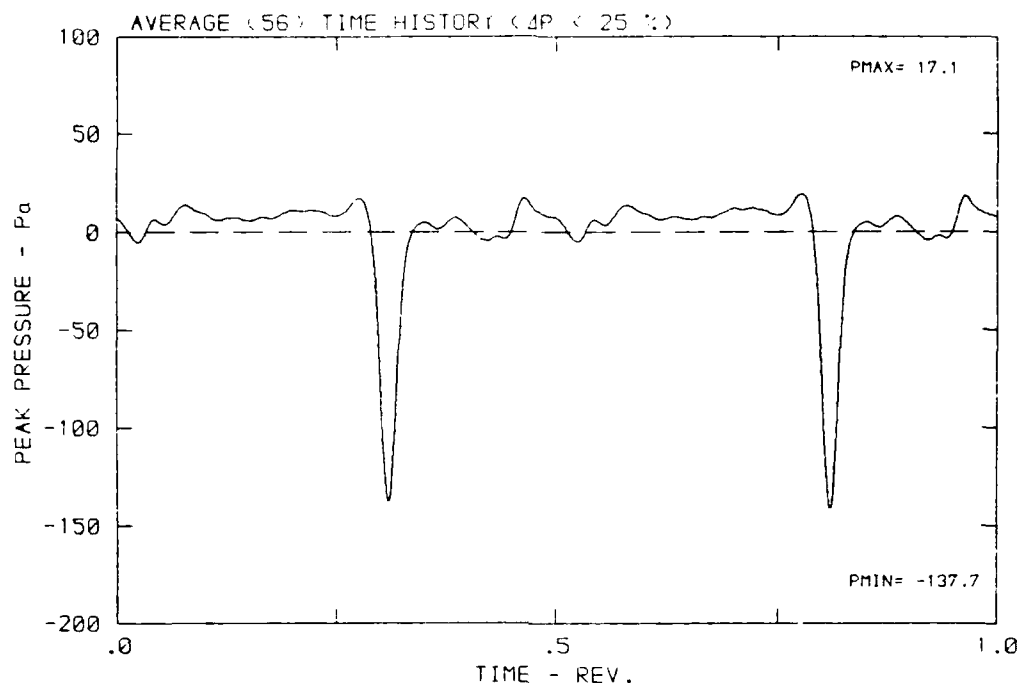
DATA POINT: GC-3 RUN: 144 MP: 3

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



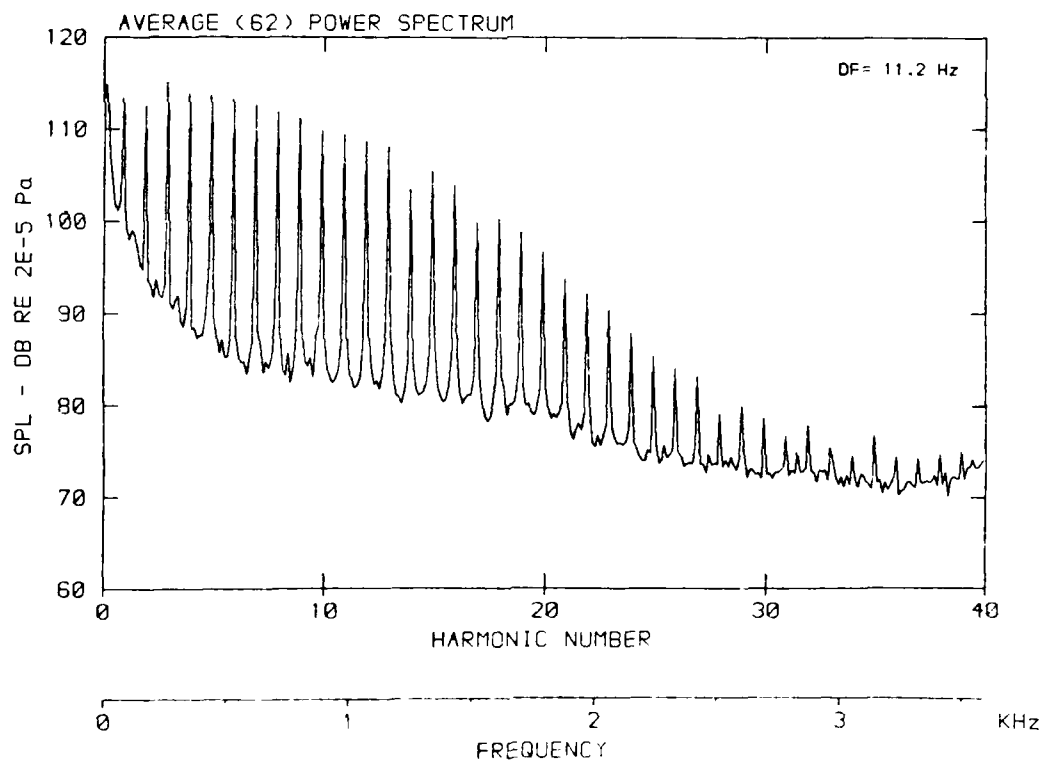
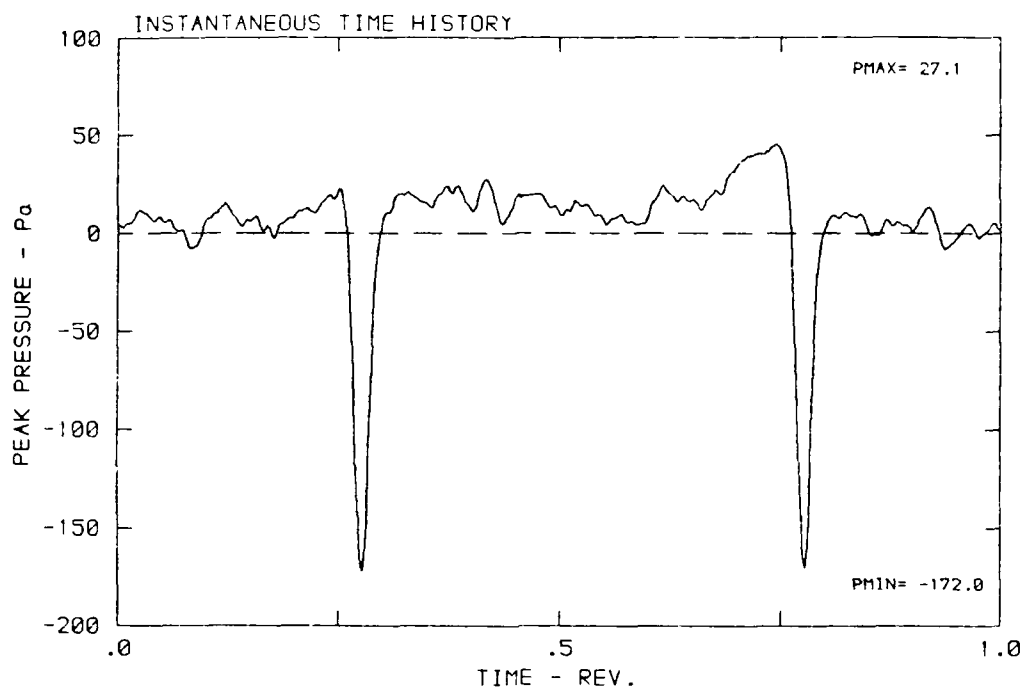
DATA POINT: GC-3 RUN: 144 MP: 3

β : 20.7° MH: .8741 n: 2700 rpm v/u : .269 ϕ : -7.4° T: 288.2 K



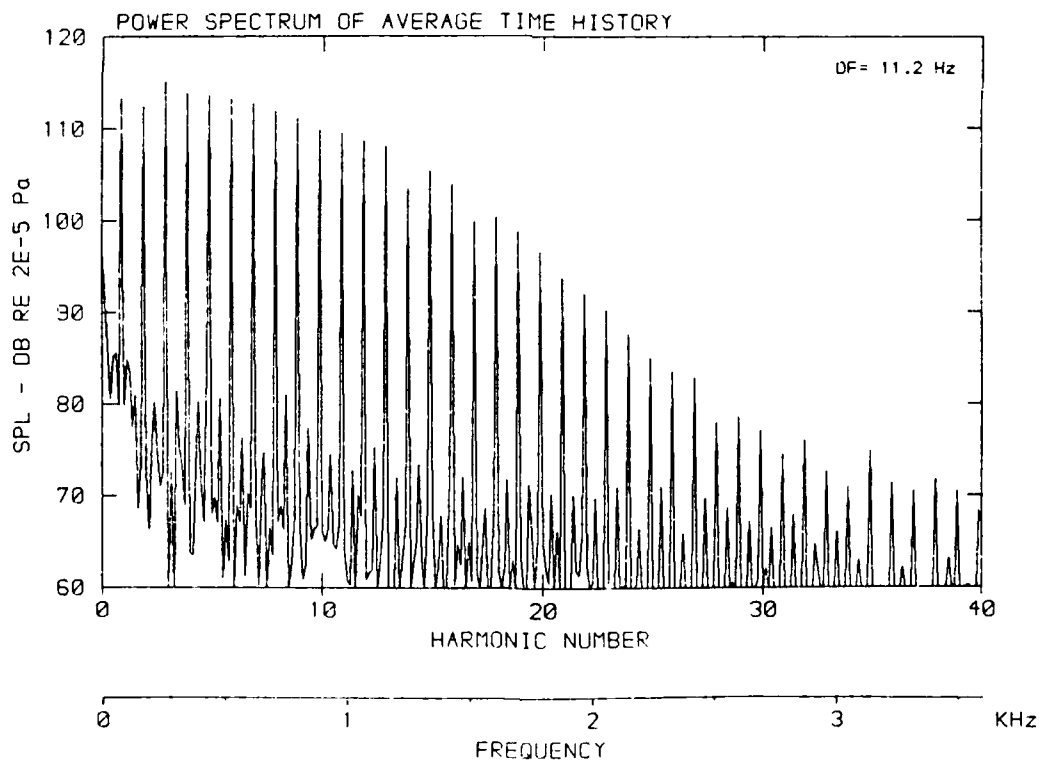
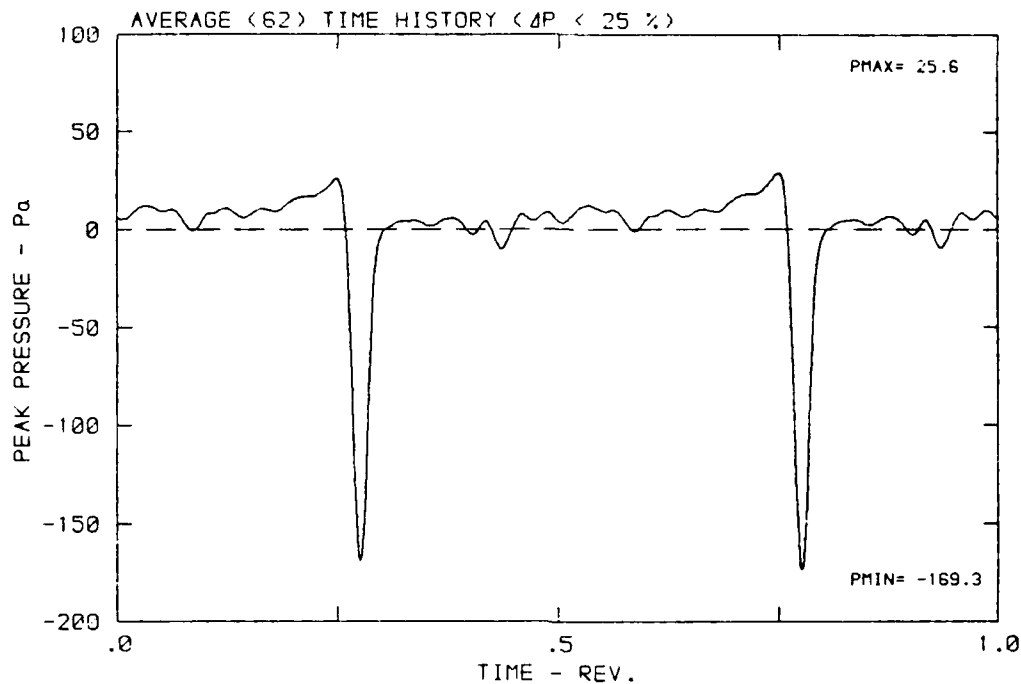
DATA POINT: GC-3 RUN: 144 MP: 4

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



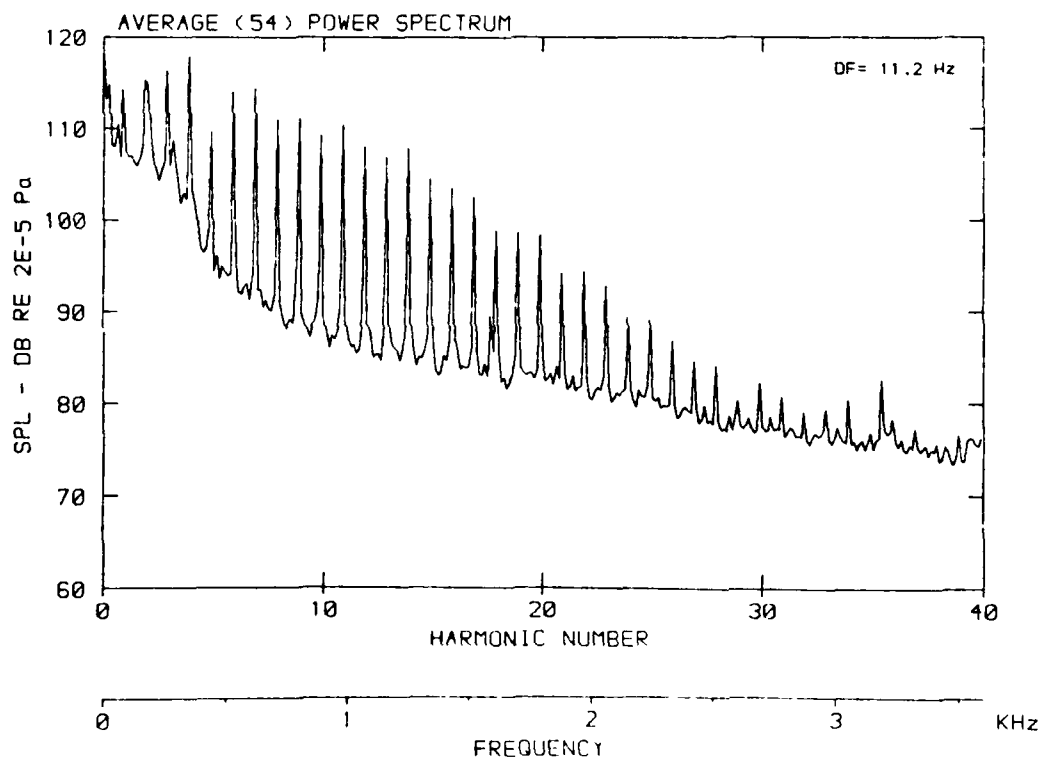
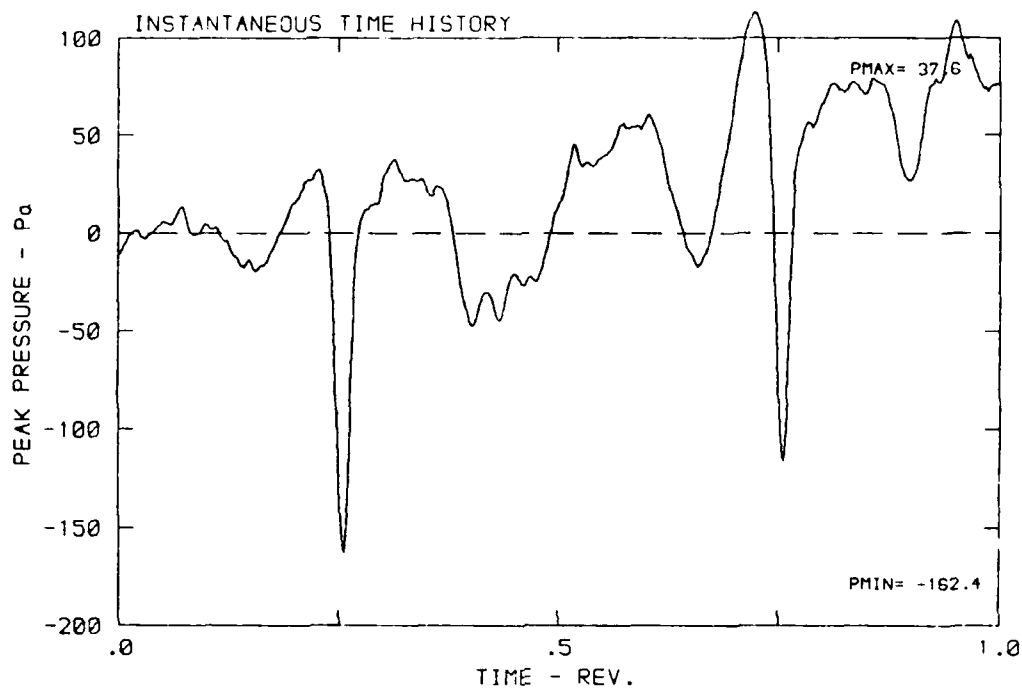
DATA POINT: GC-3 RUN: 144 MP: 4

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



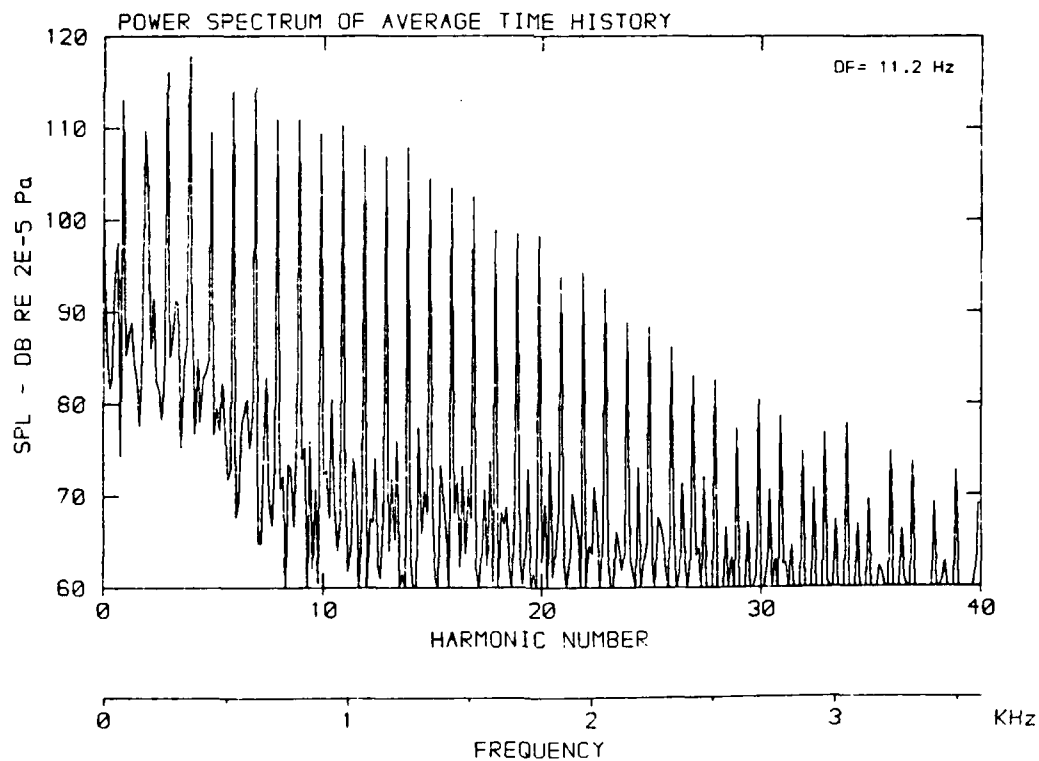
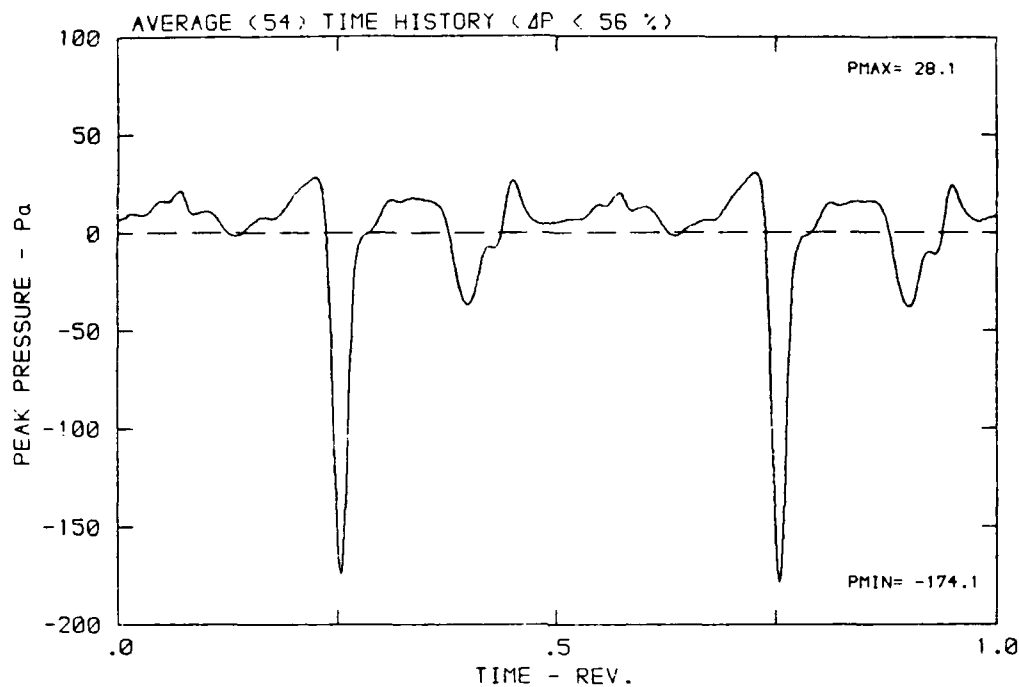
DATA POINT: GC-3 RUN: 144 MP: 5

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



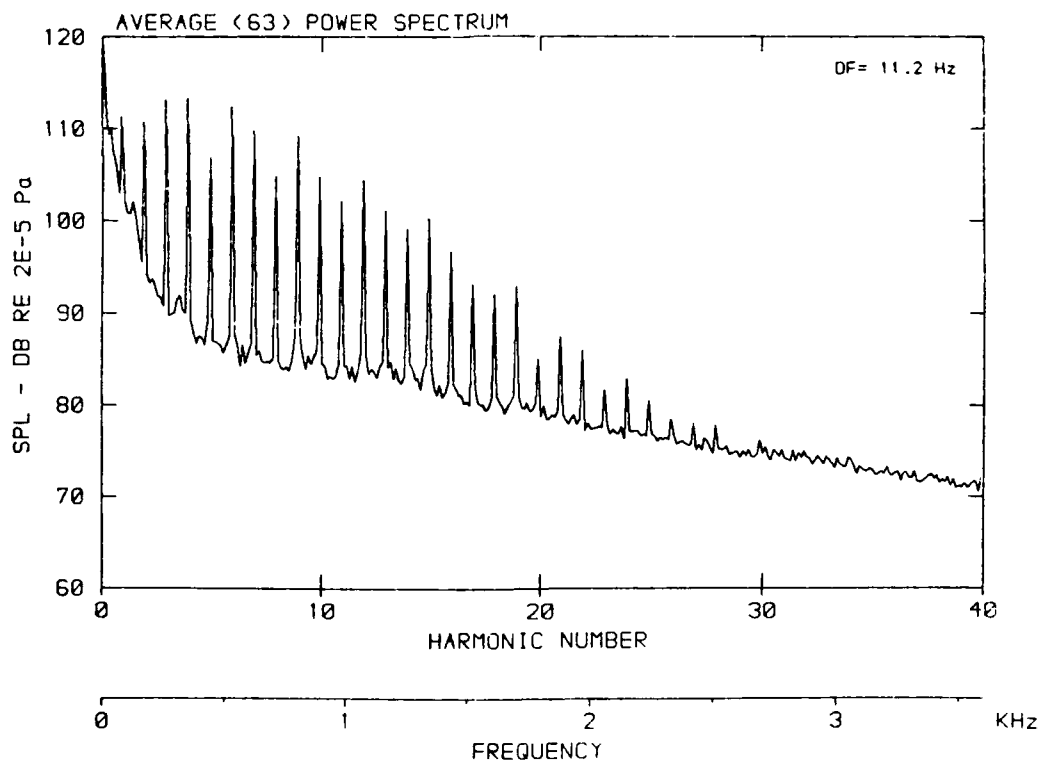
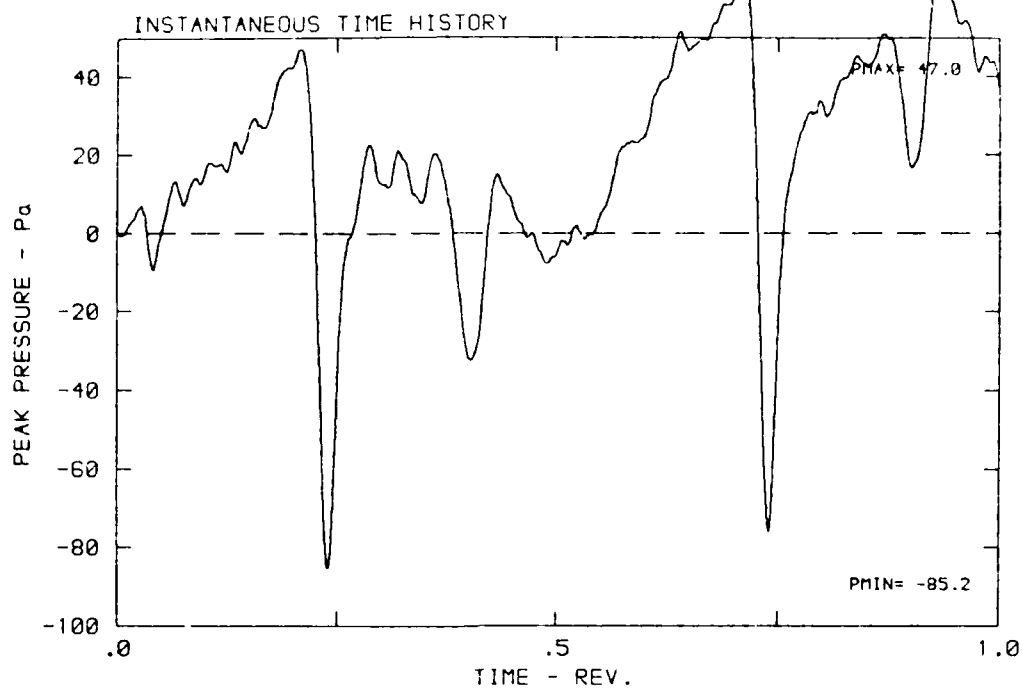
DATA POINT: GC-3 RUN: 144 MP: 5

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 268.2 K



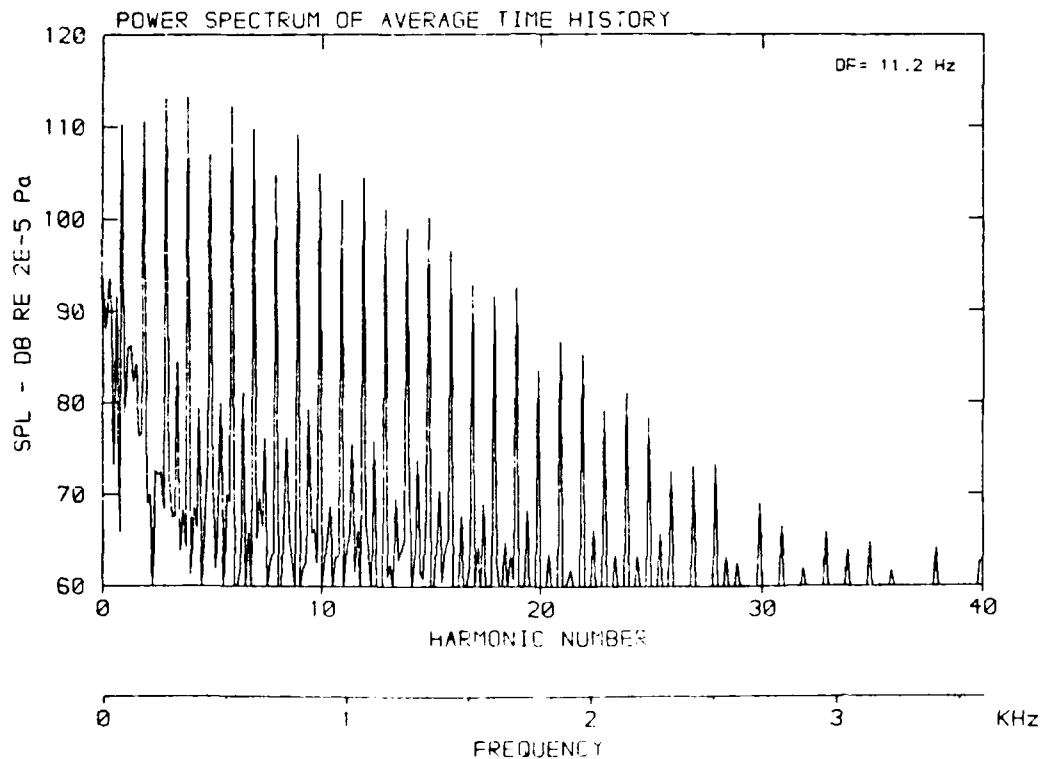
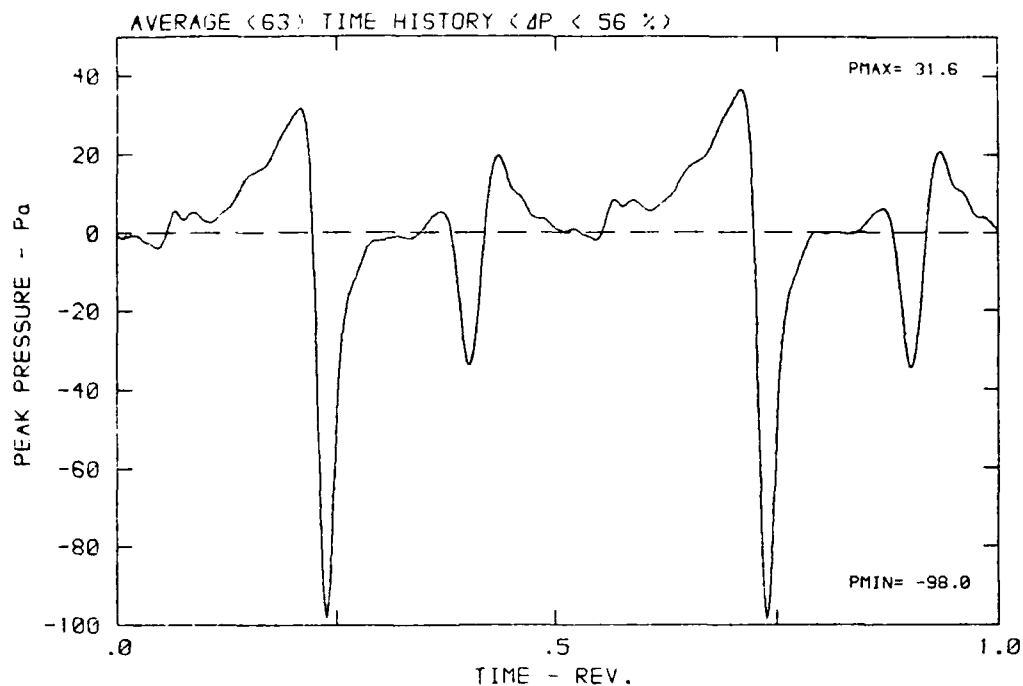
DATA POINT: GC-3 RUN: 144 MP: 6

β : 20.7° MH: .8741 n: 2700 rpm v/u : .269 ϕ : -7.4° T : 288.2 K



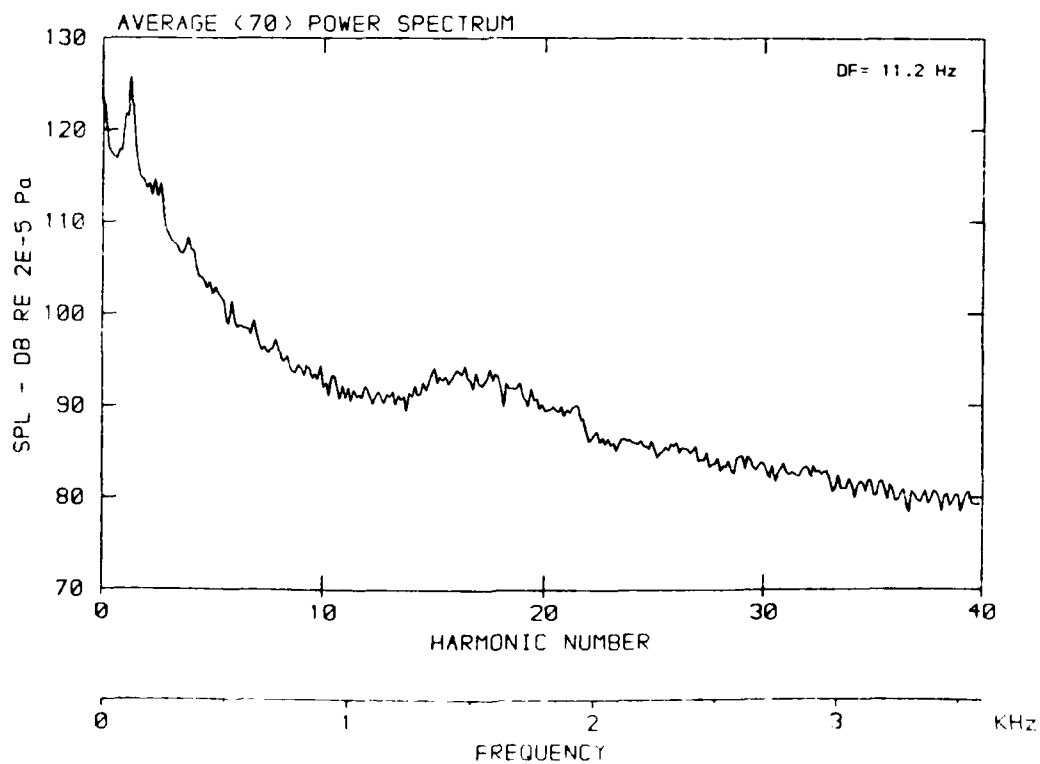
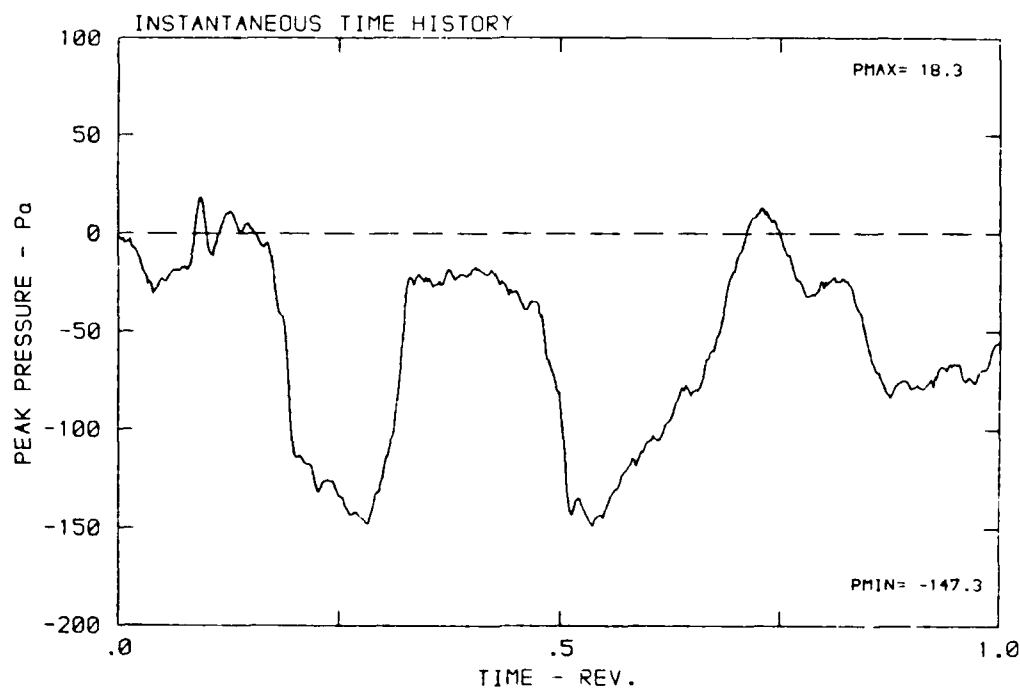
DATA POINT: GC-3 RUN: 144 MP: 6

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



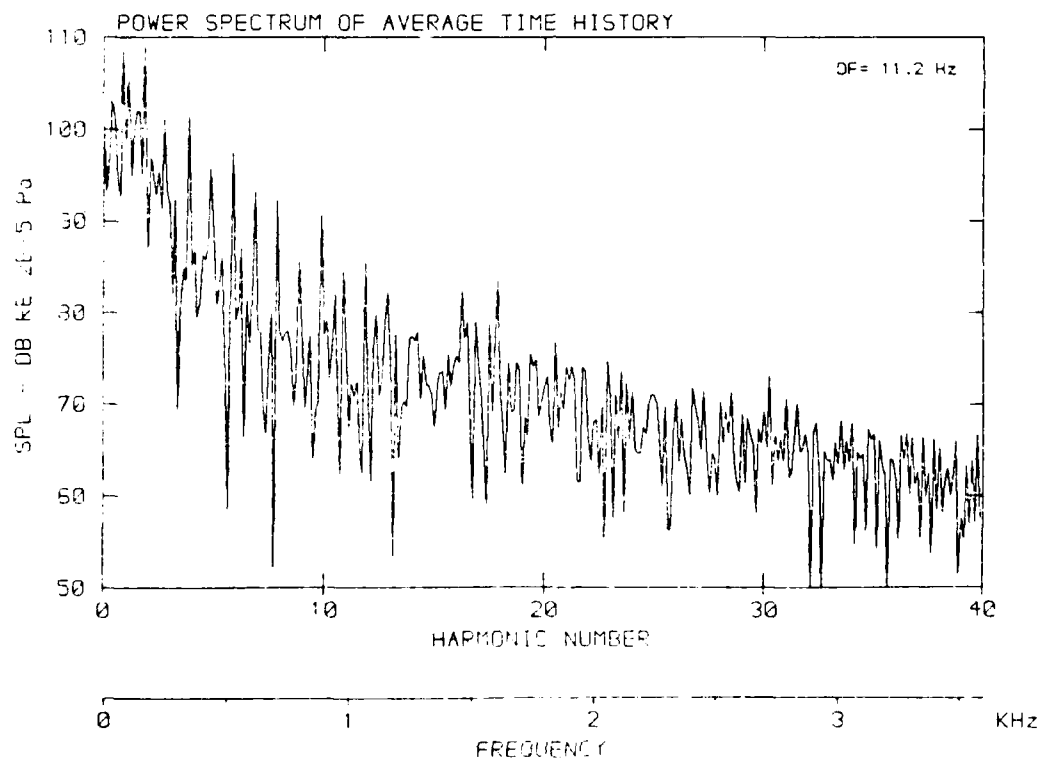
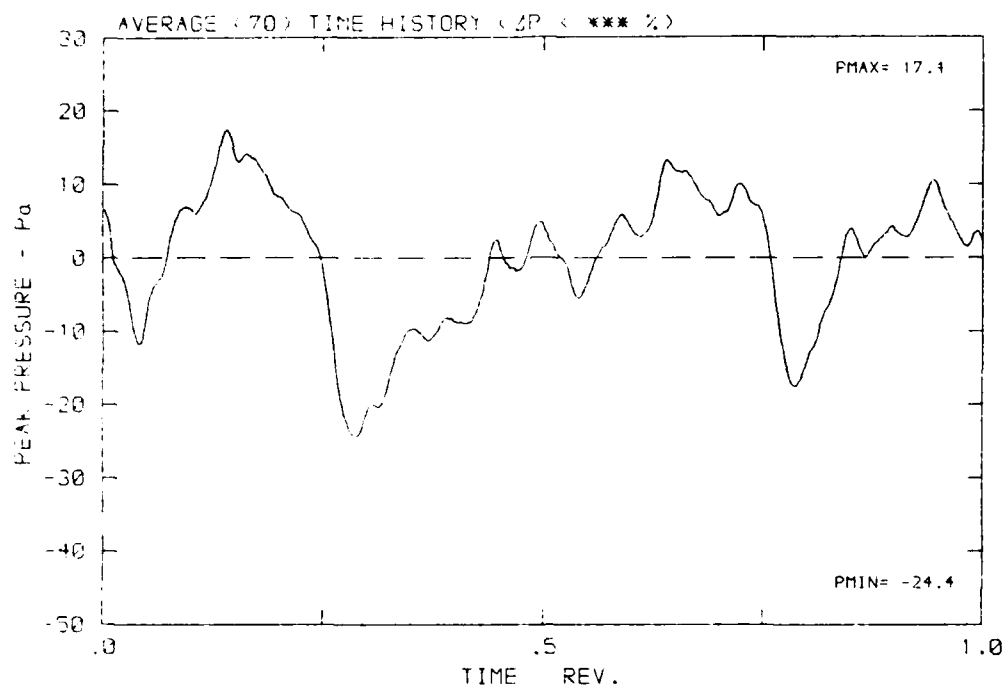
DATA POINT: GC-3 RUN: 144 MP: 7

β : 20.7° MH: .8741 n: 2700 rpm v/u : .269 ϕ : -7.4° T: 288.2 K



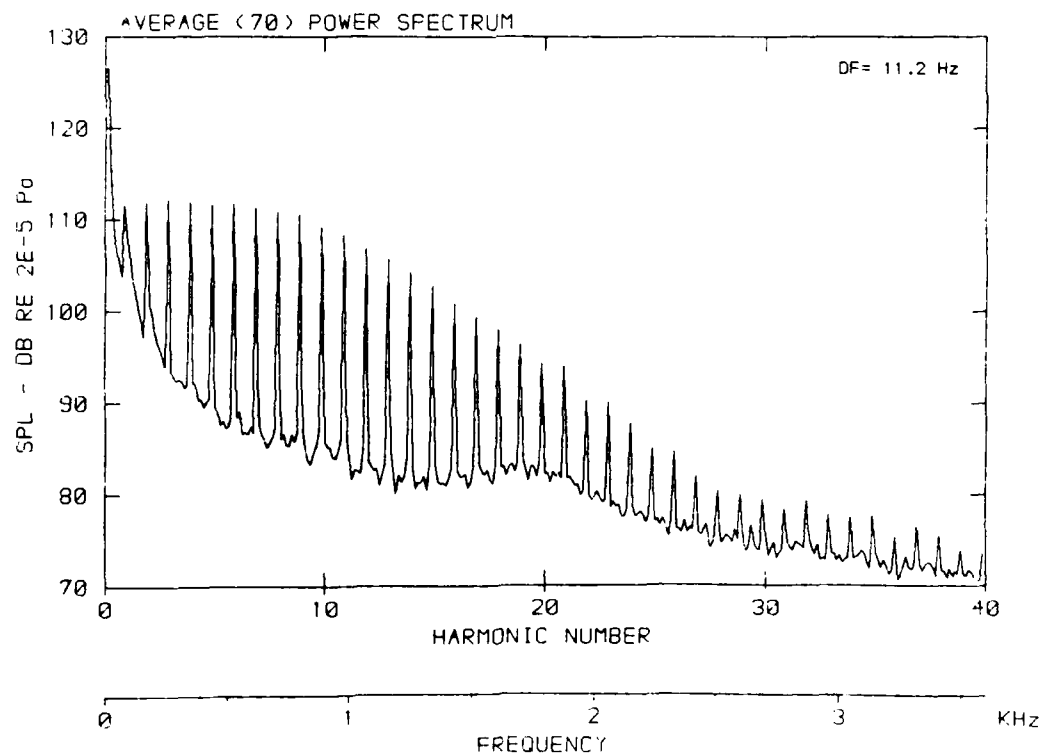
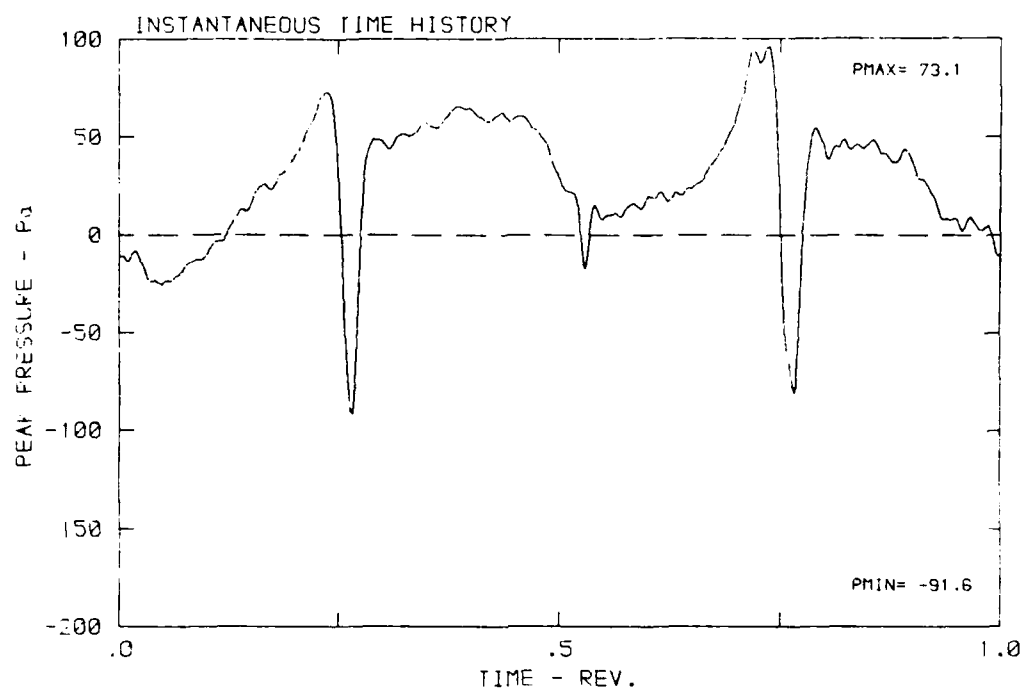
DATA POINT: 60-3 RUN: 144 MP: 7

β : 20.7° MH: .3741 n: 2700 rpm v/u : .269 ϕ : -7.4° T: 288.2 K



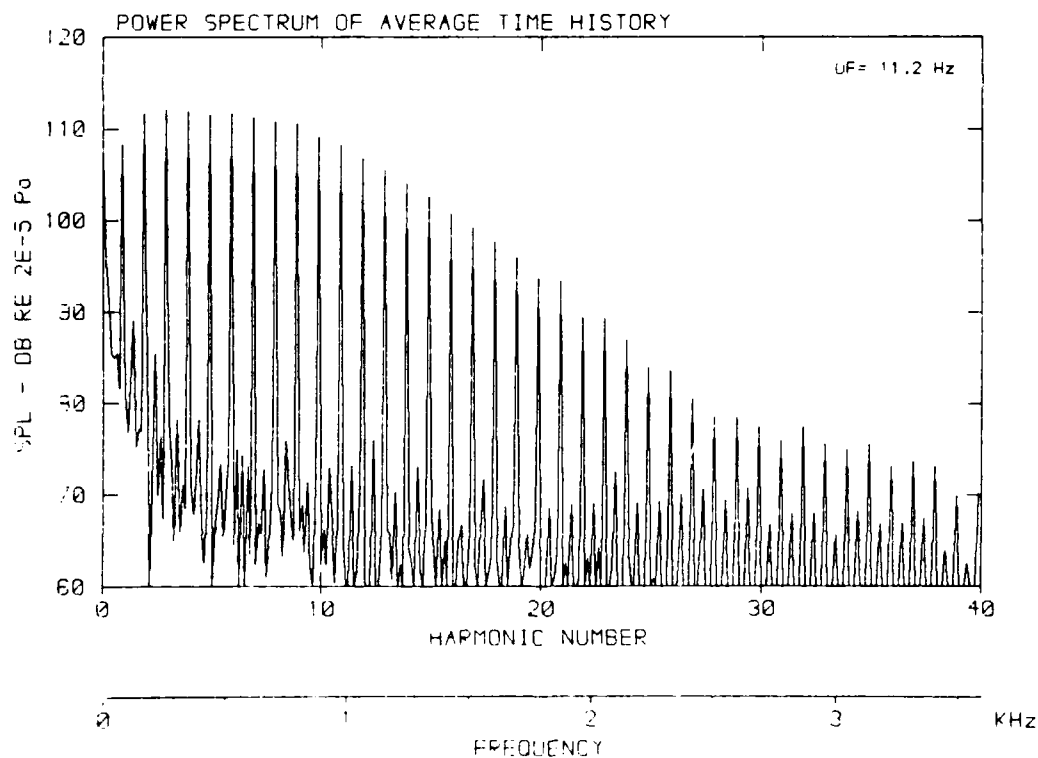
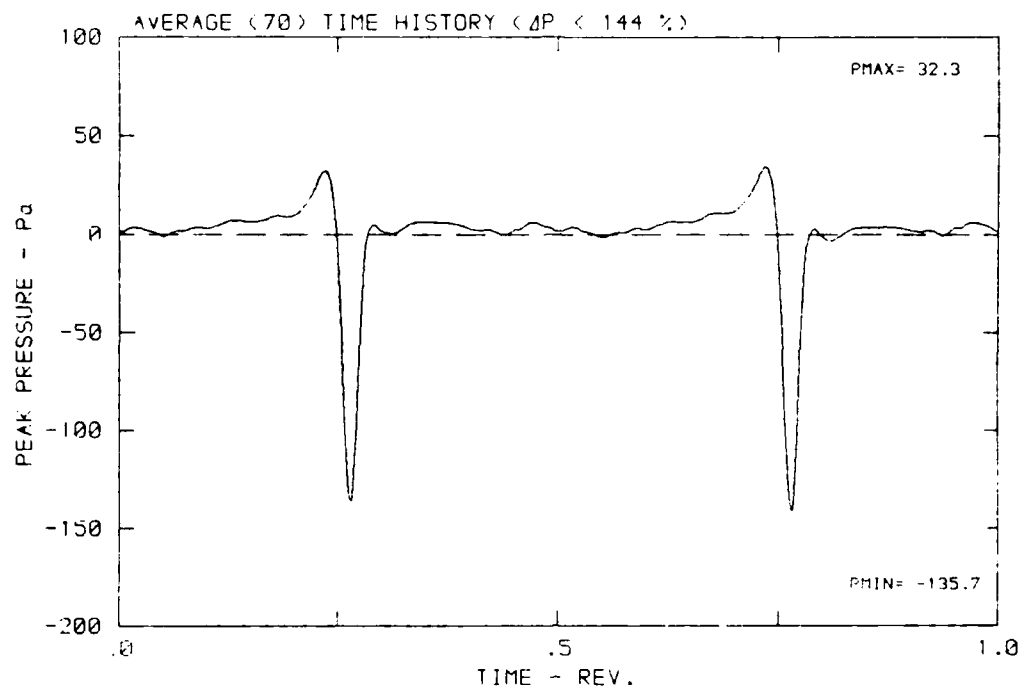
DATA POINT: GC-3 RUN: 144 MP: 8

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



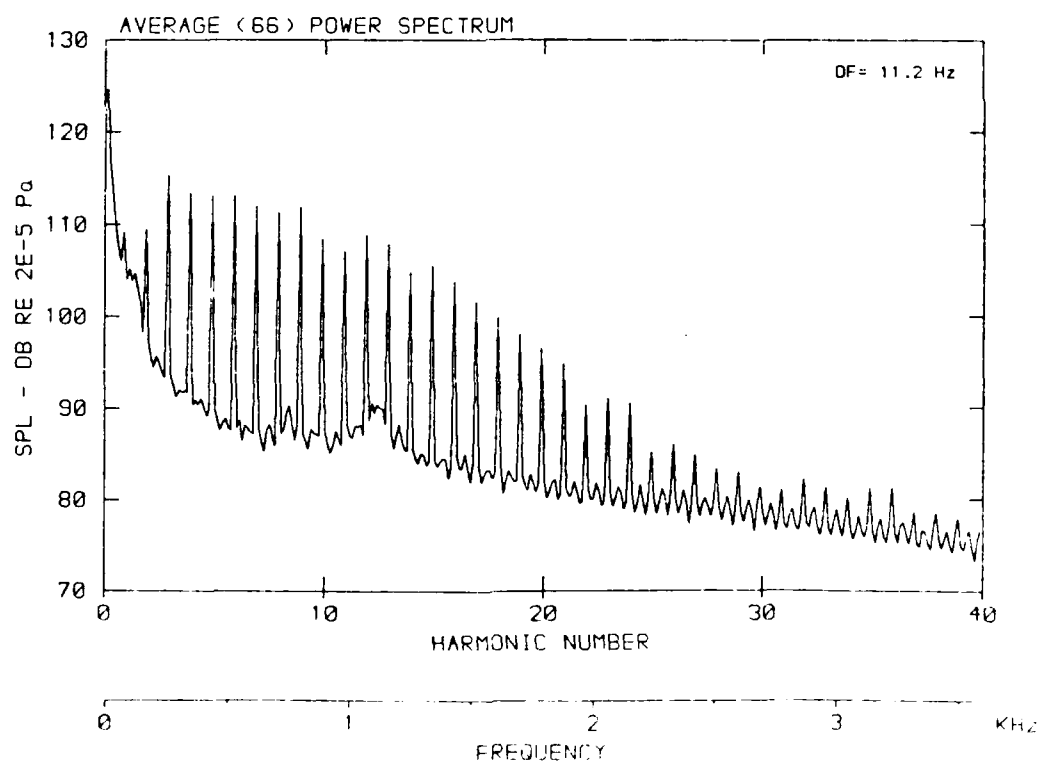
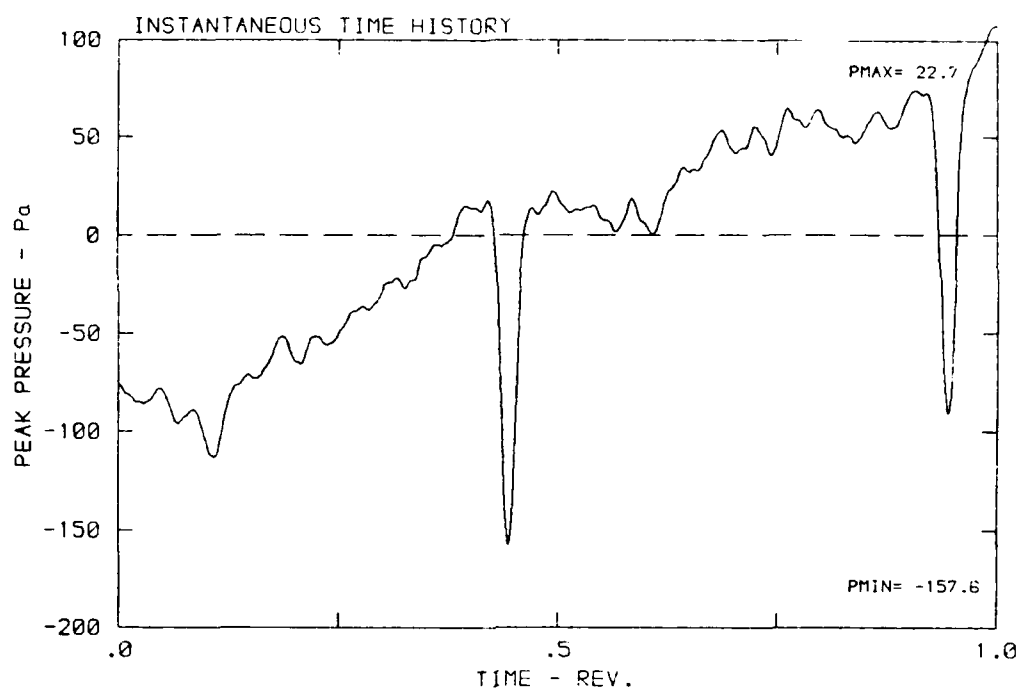
DATA POINT: GC-3 RUN: 144 MP: 8

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



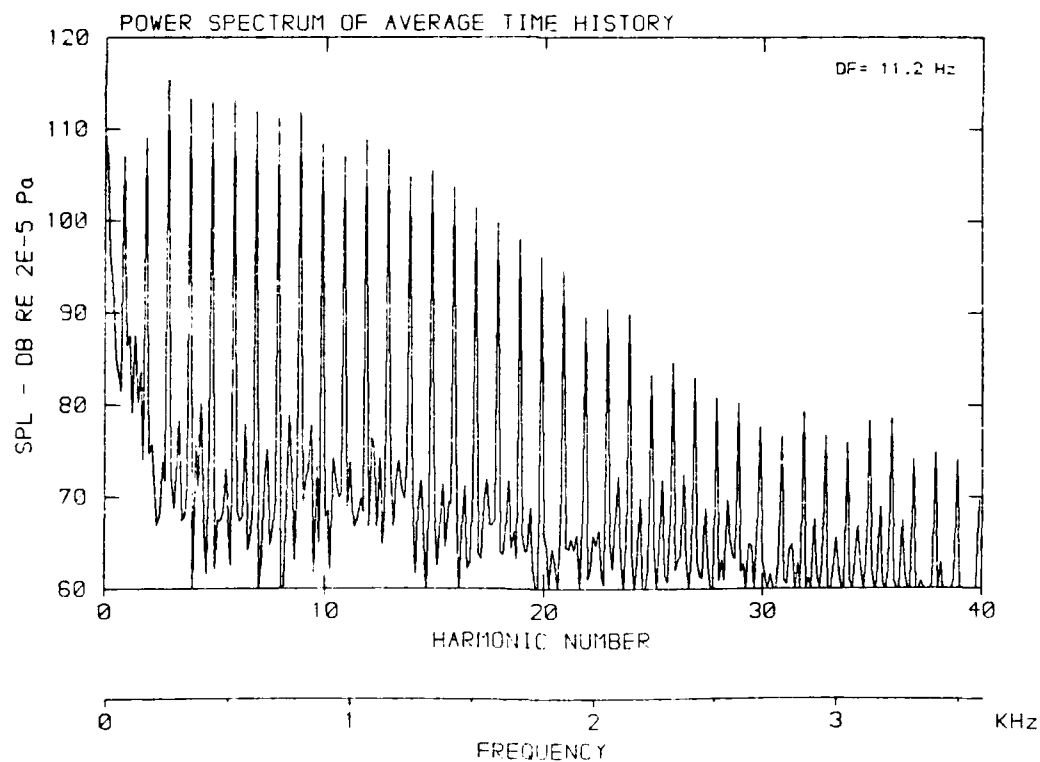
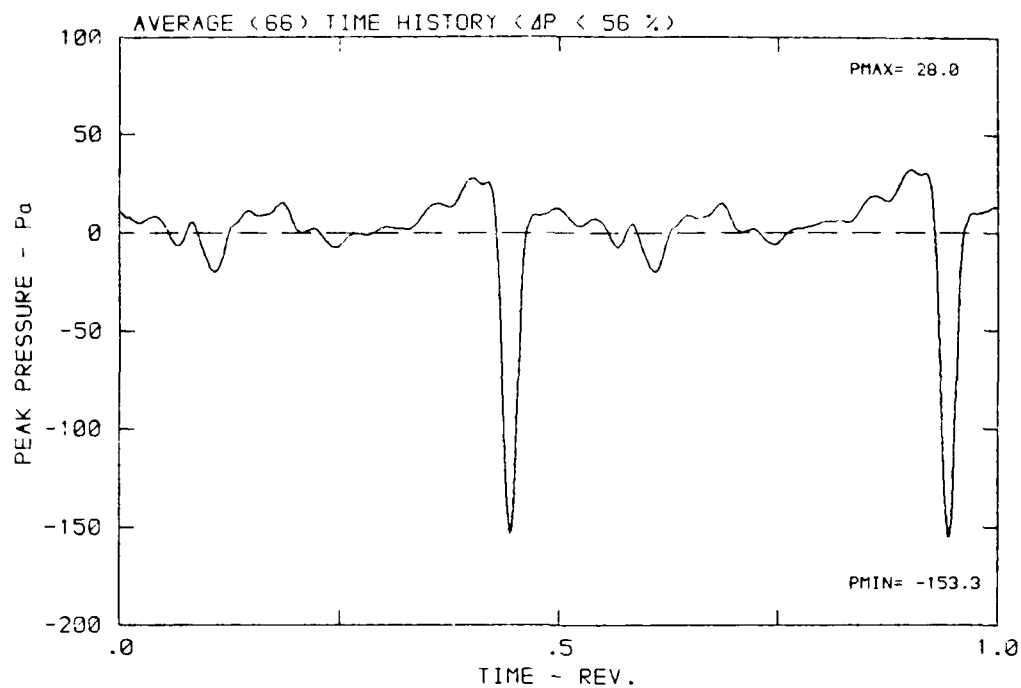
DATA POINT: GC-3 RUN: 144 MP: 9

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 283.2 K



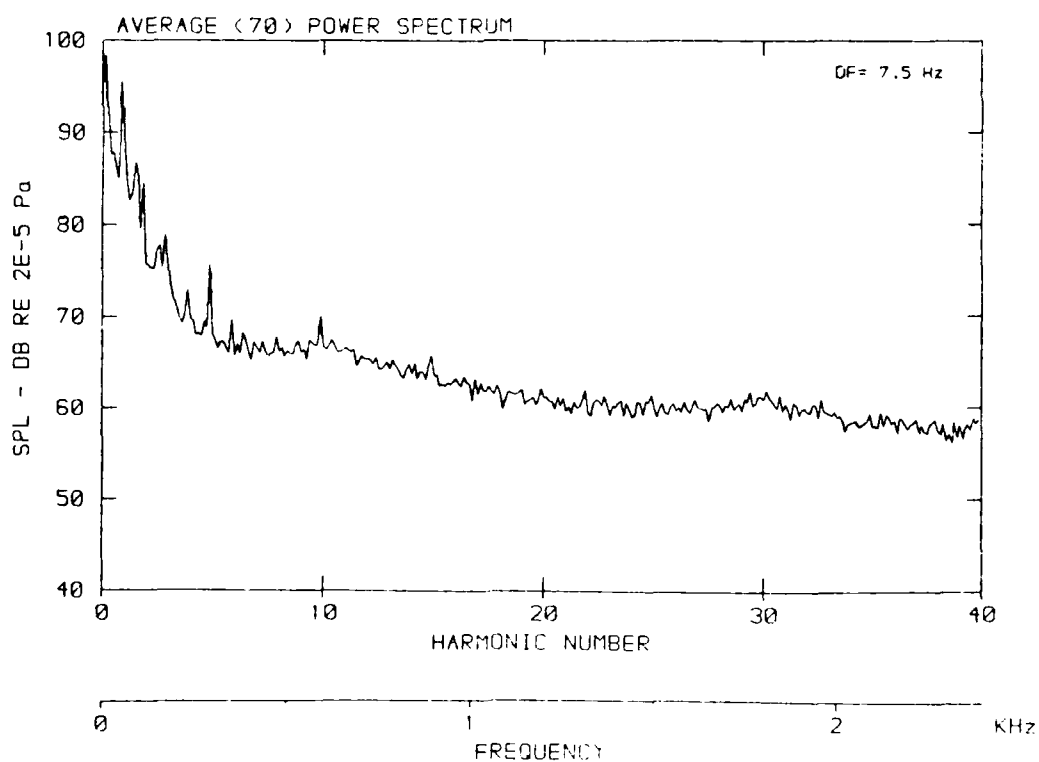
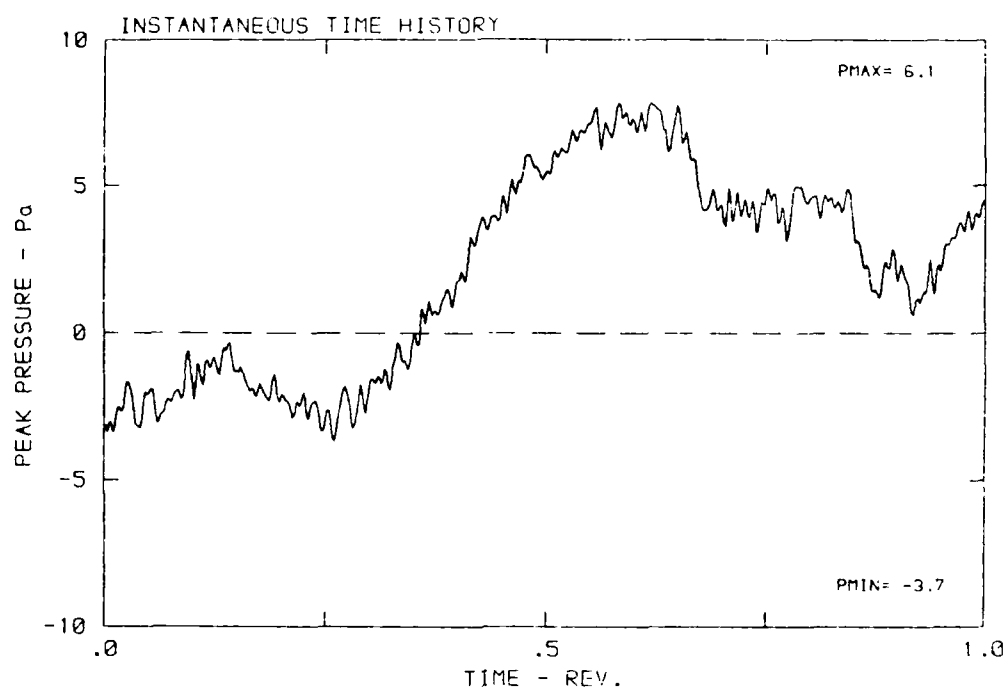
DATA POINT: GC-3 RUN: 144 MP: 9

β : 20.7° MH: .8741 n: 2700 rpm v/u: .269 ϕ : -7.4° T: 288.2 K



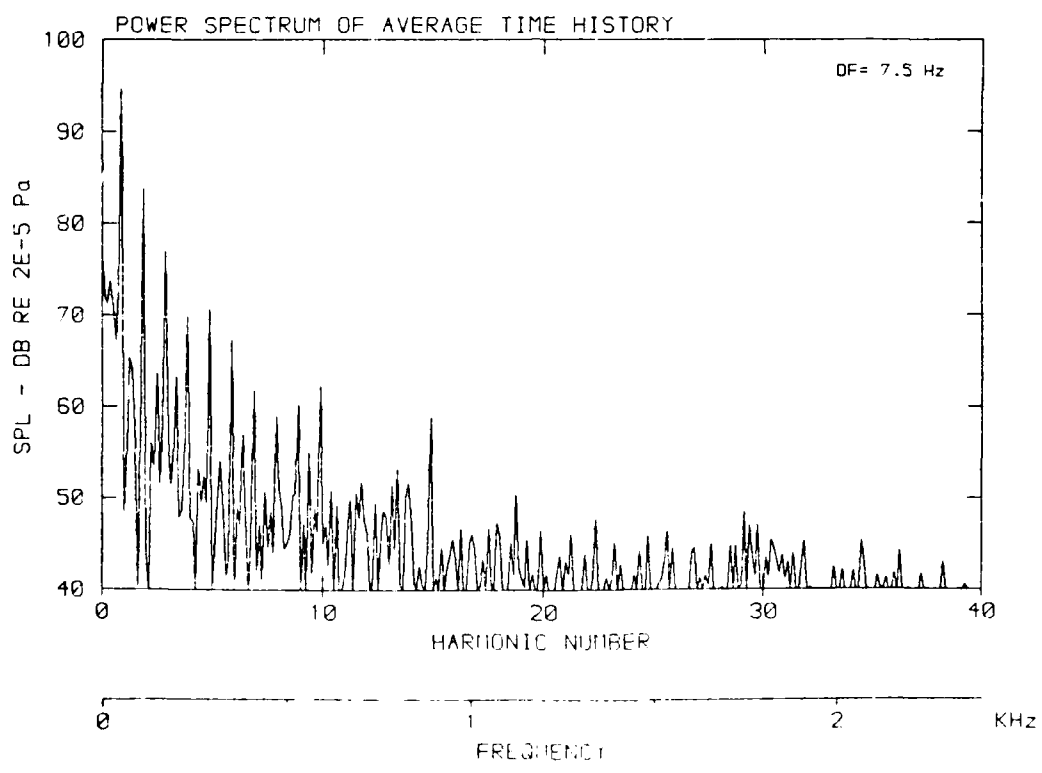
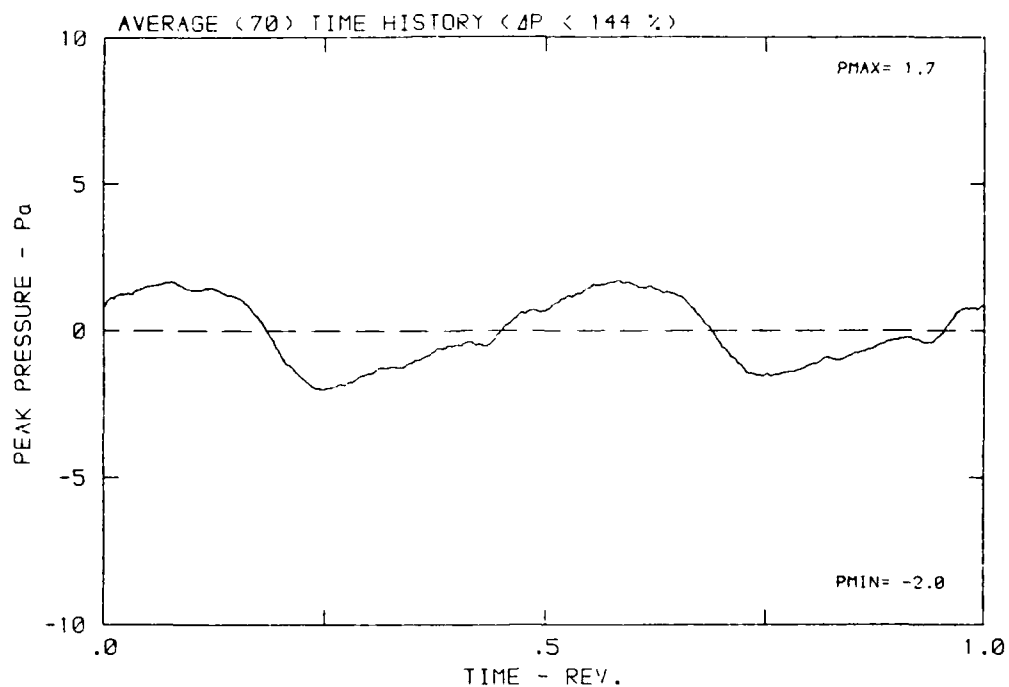
DATA POINT: GC-4 RUN: 145 MP: 1

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° T: 255.7 s



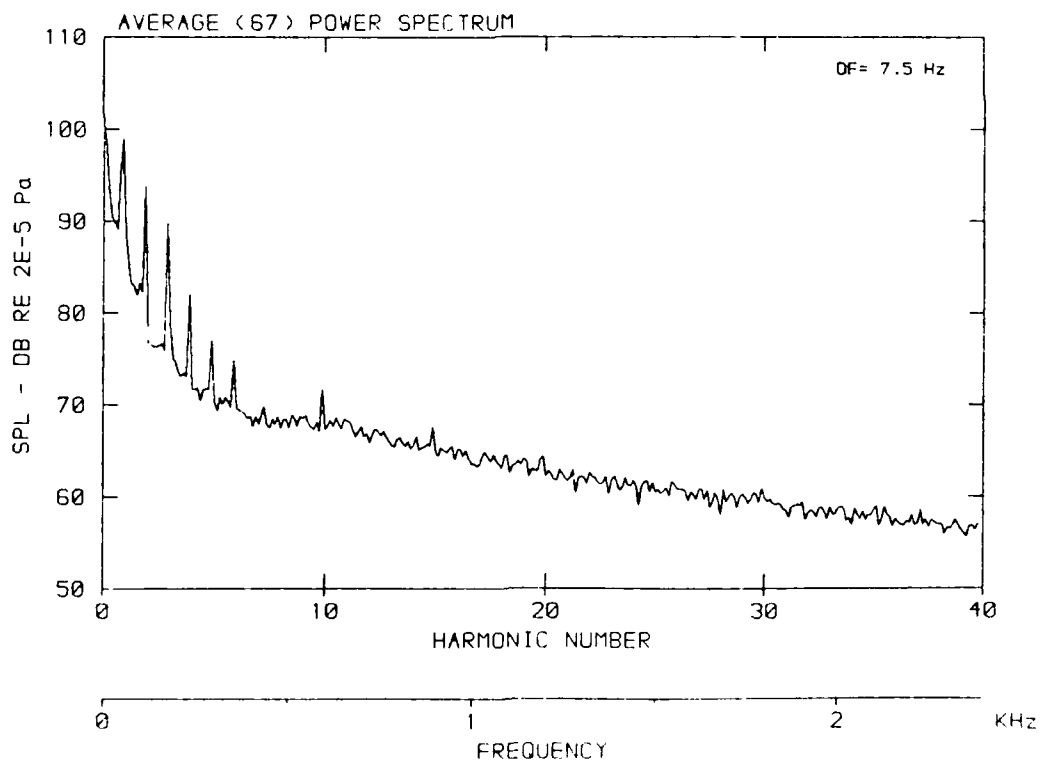
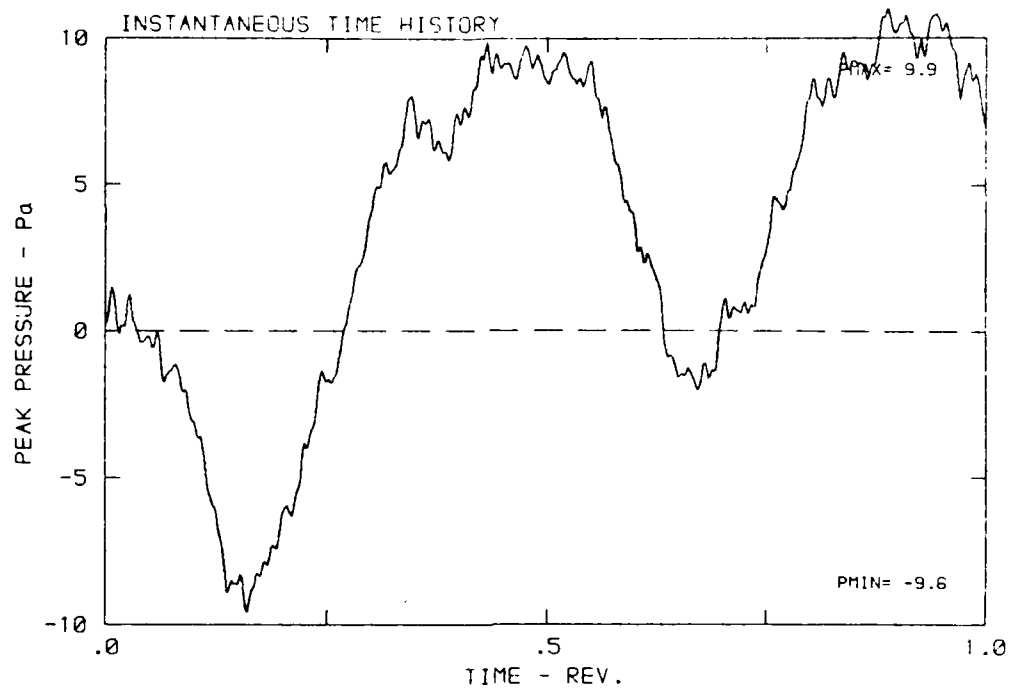
DATA POINT : GC-4 RUN : 145 MP : 1

β : 24.4° MH : .5842 n : 1800 rpm v/u : .269 ϕ : -7.4° T : 286.7 K



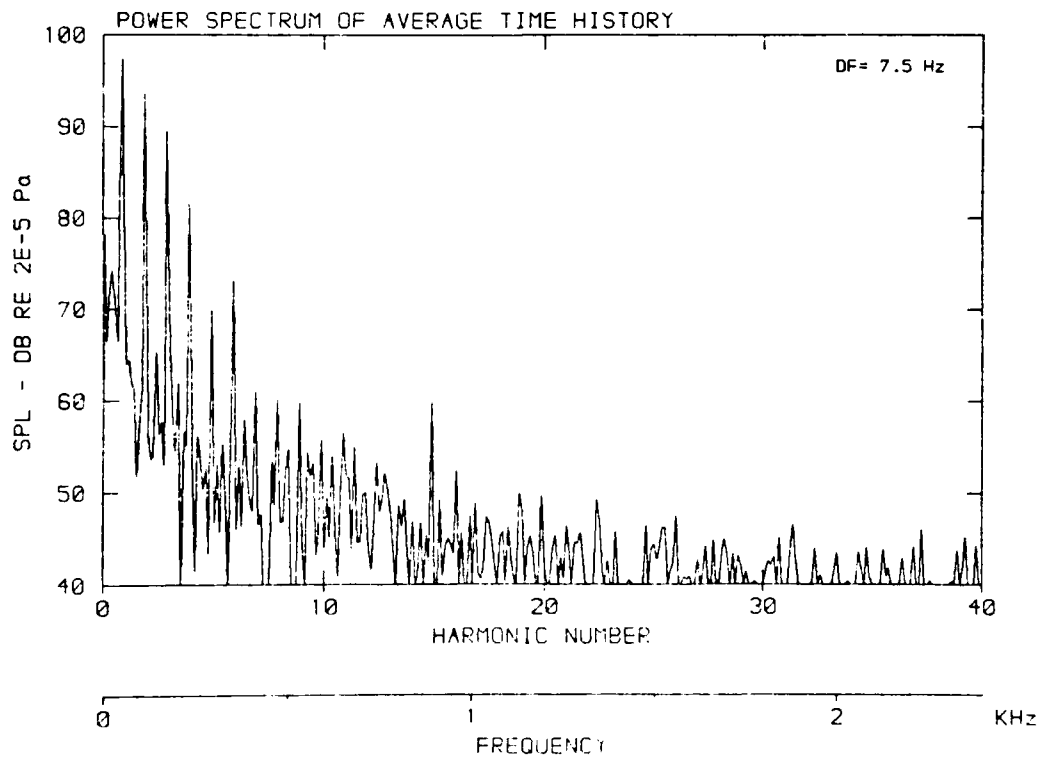
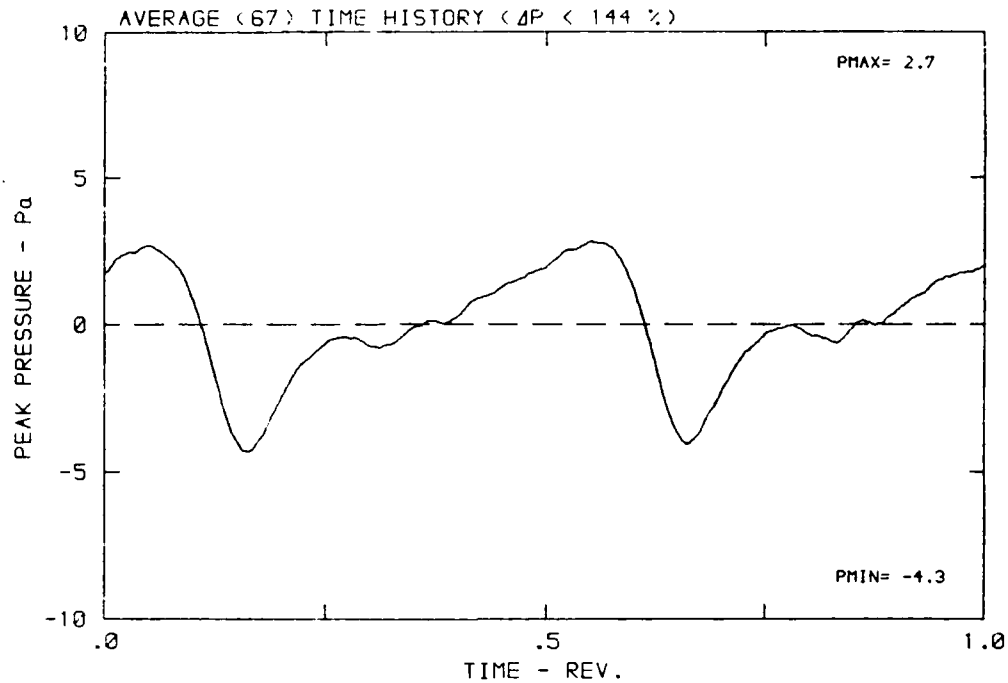
DATA POINT: GC-4 RUN: 145 MP: 2

β : 24.4° MH: .5842 n: 1600 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



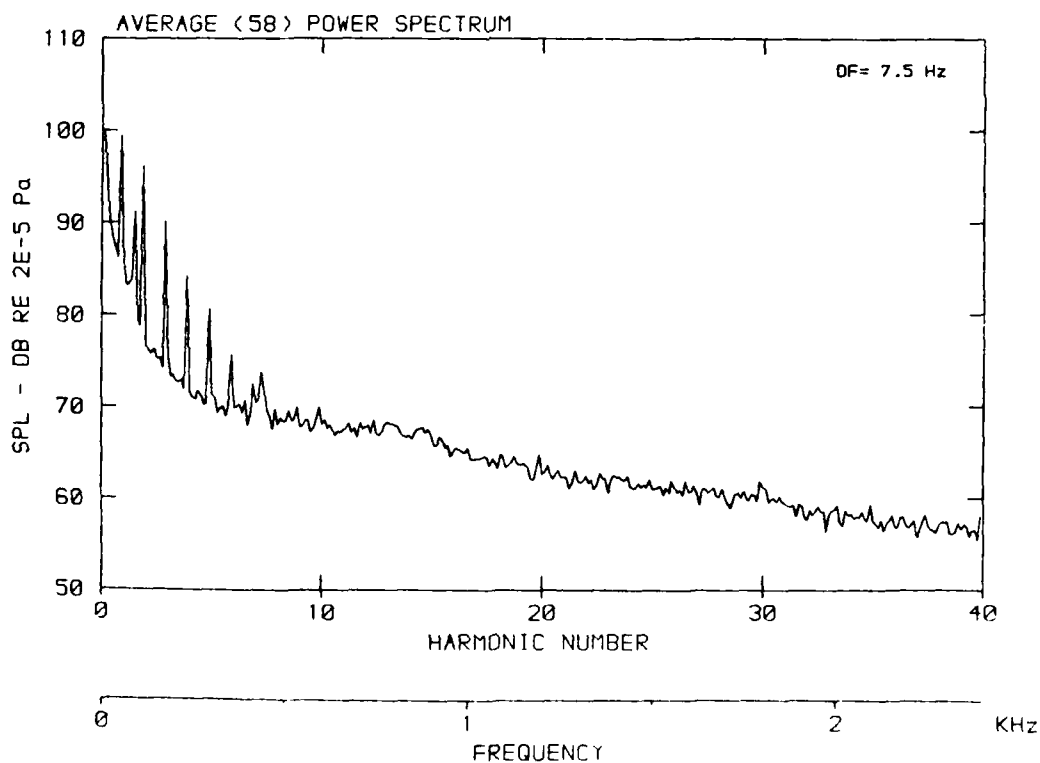
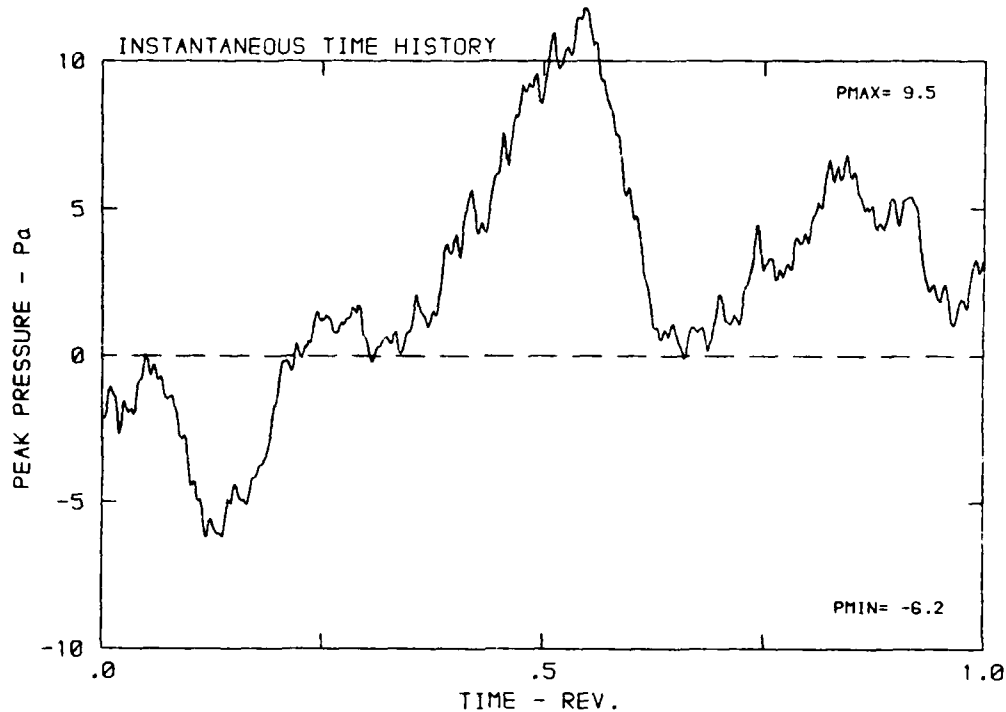
DATA POINT: GC-4 RUN: 145 MP: 2

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° T: 286.7 K



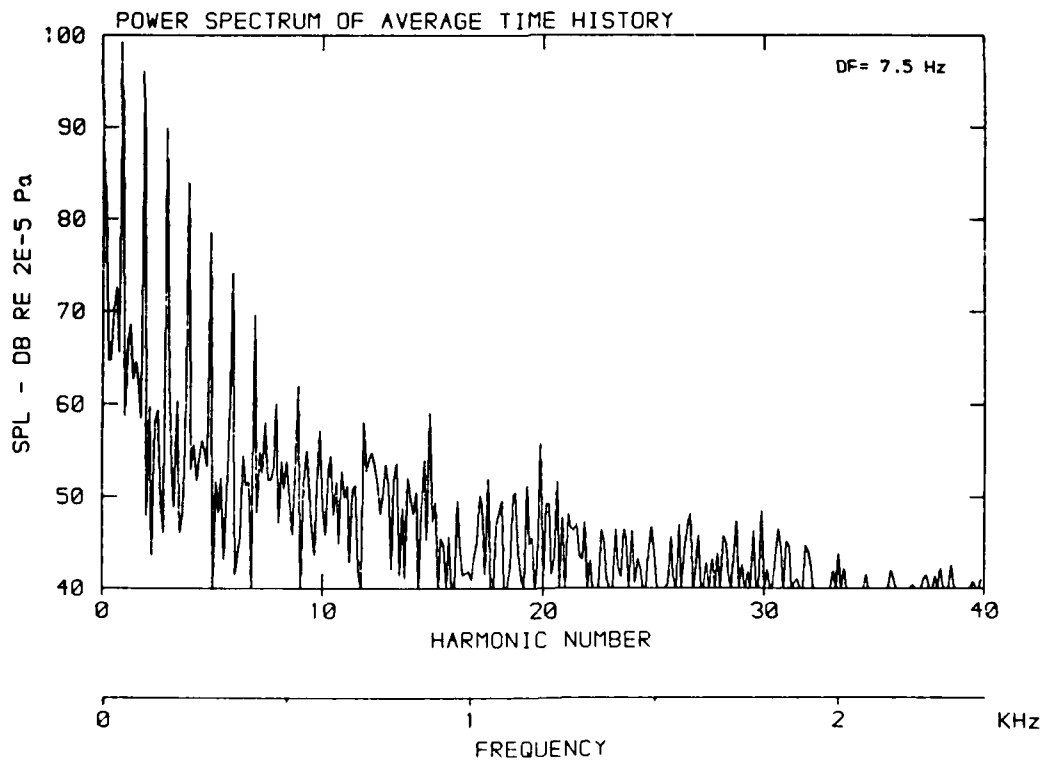
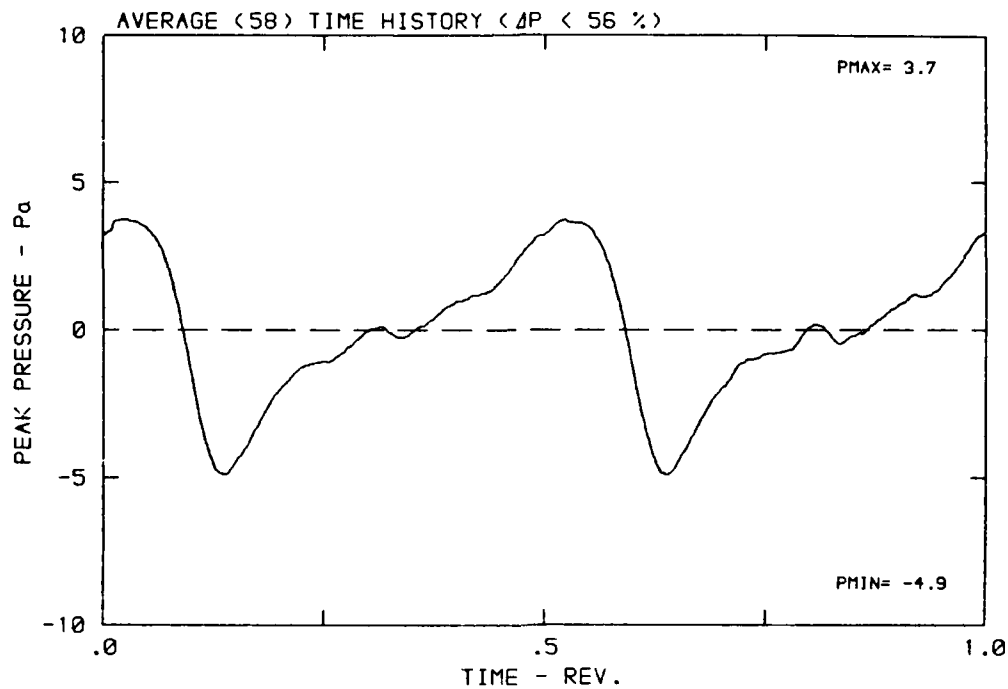
DATA POINT: GC-4 RUN: 145 MP: 3

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° T: 286.7 K



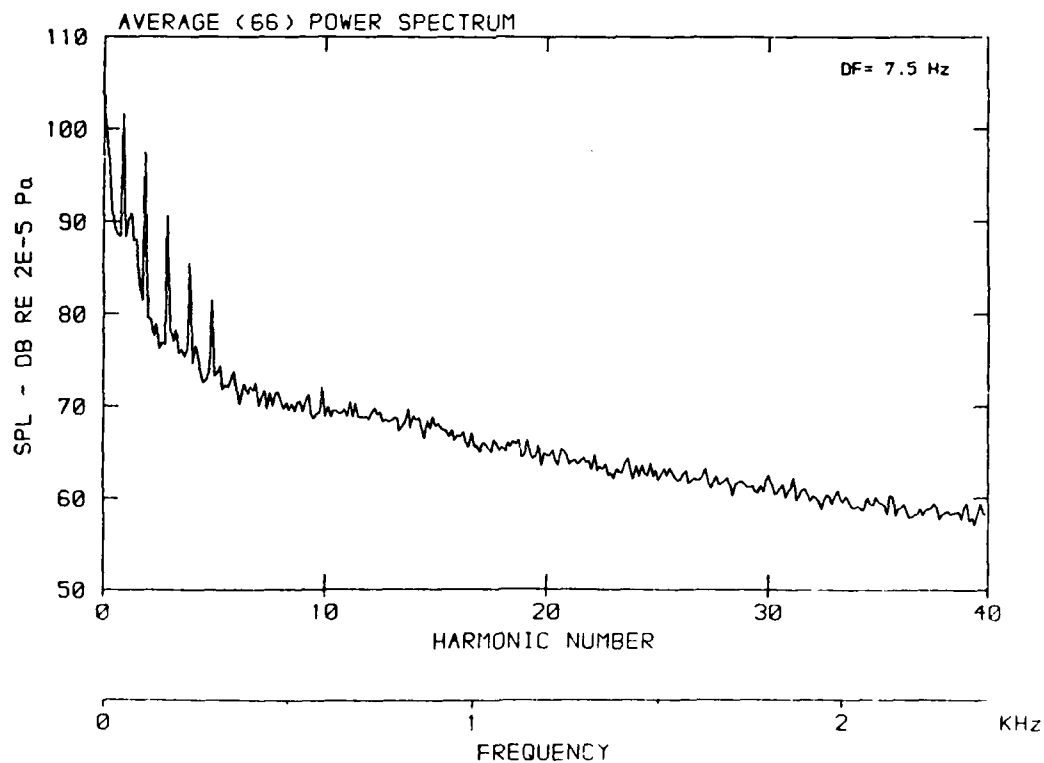
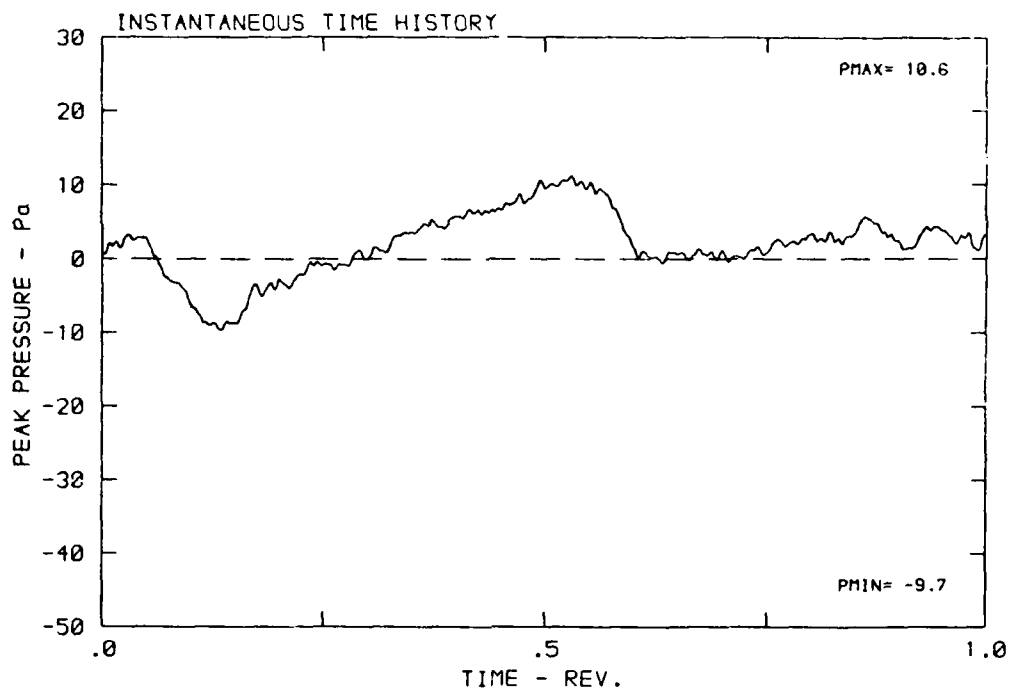
DATA POINT: GC-4 RUN: 145 MP: 3

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



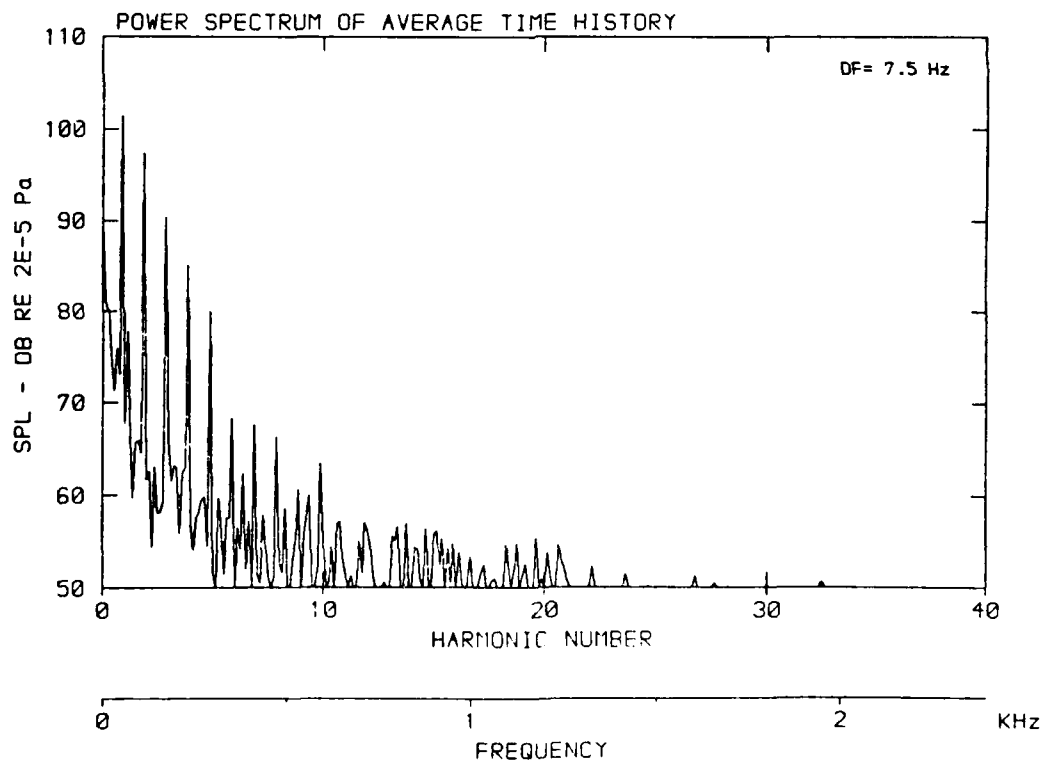
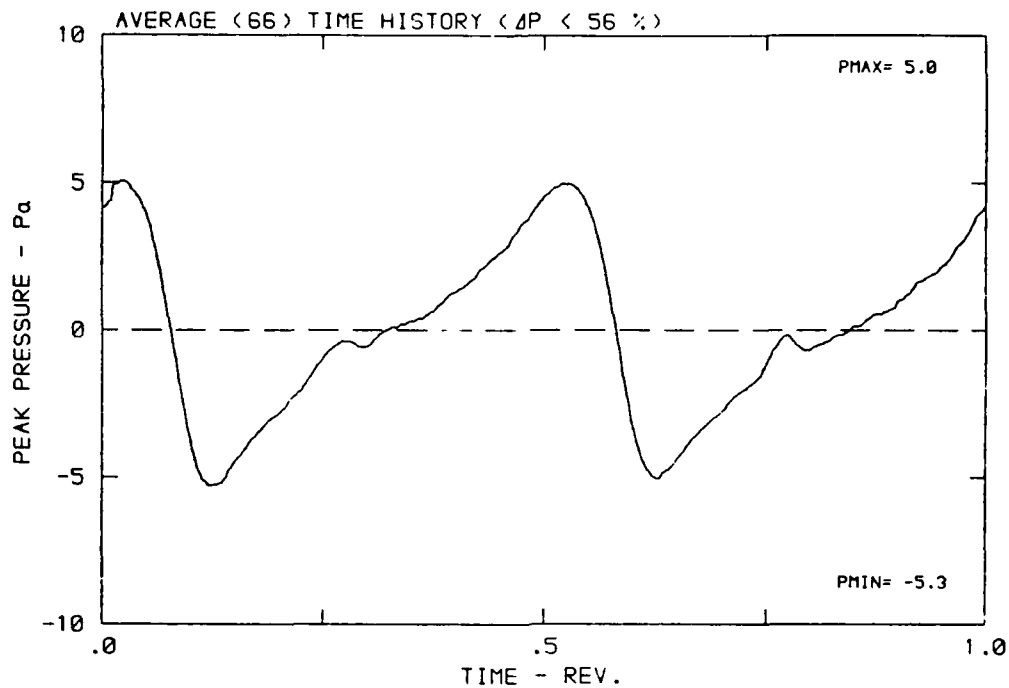
DATA POINT: GC-4 RUN: 145 MP: 4

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



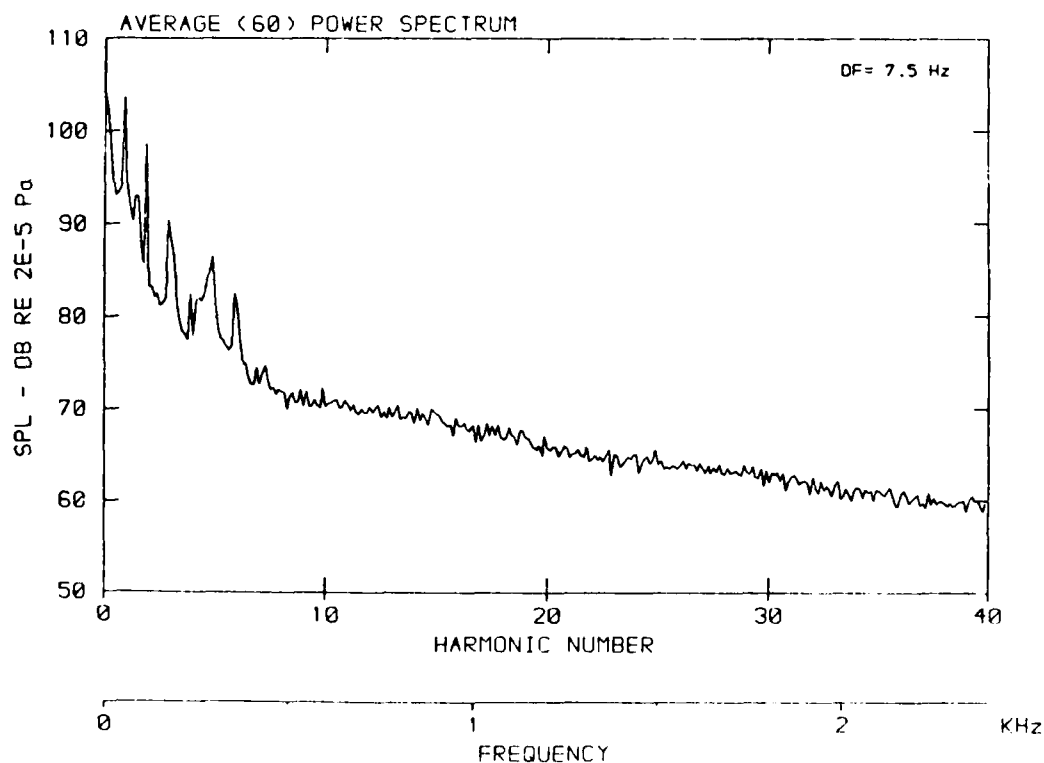
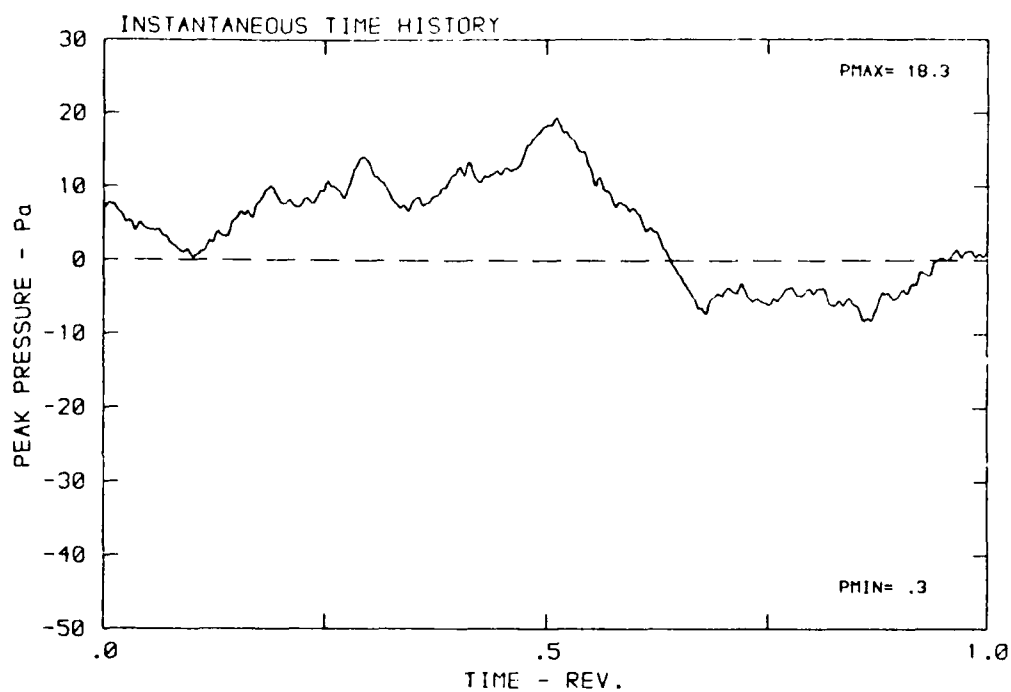
DATA POINT: GC-4 RUN: 145 MP: 4

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° T: 286.7 K



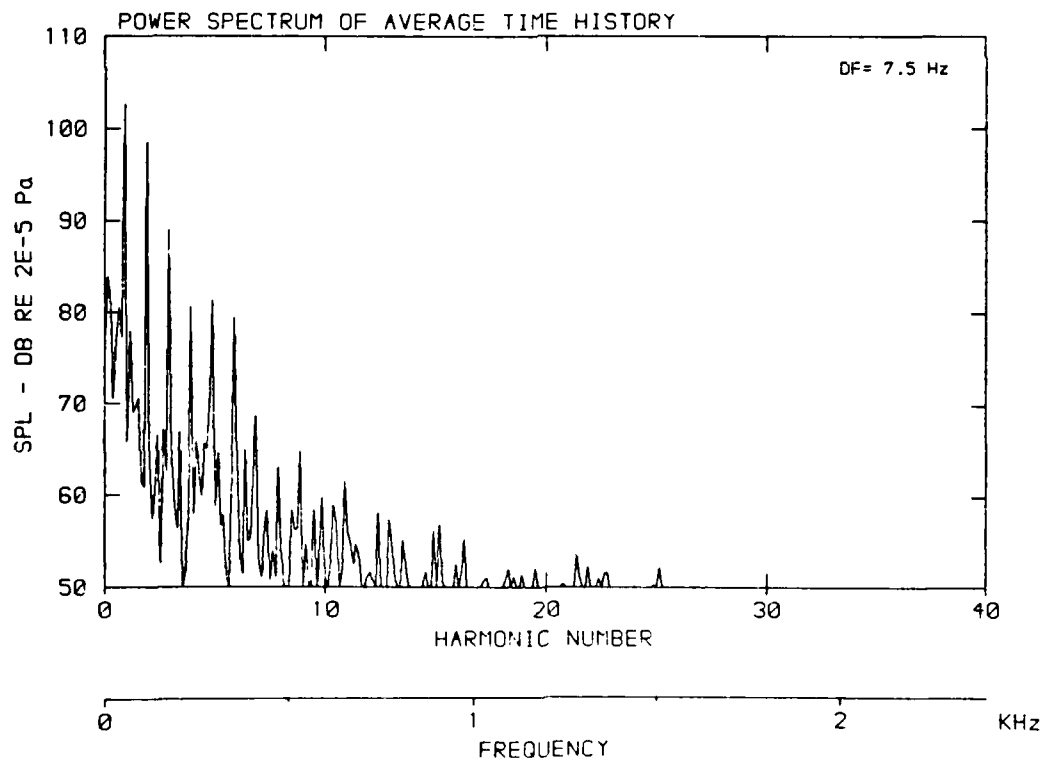
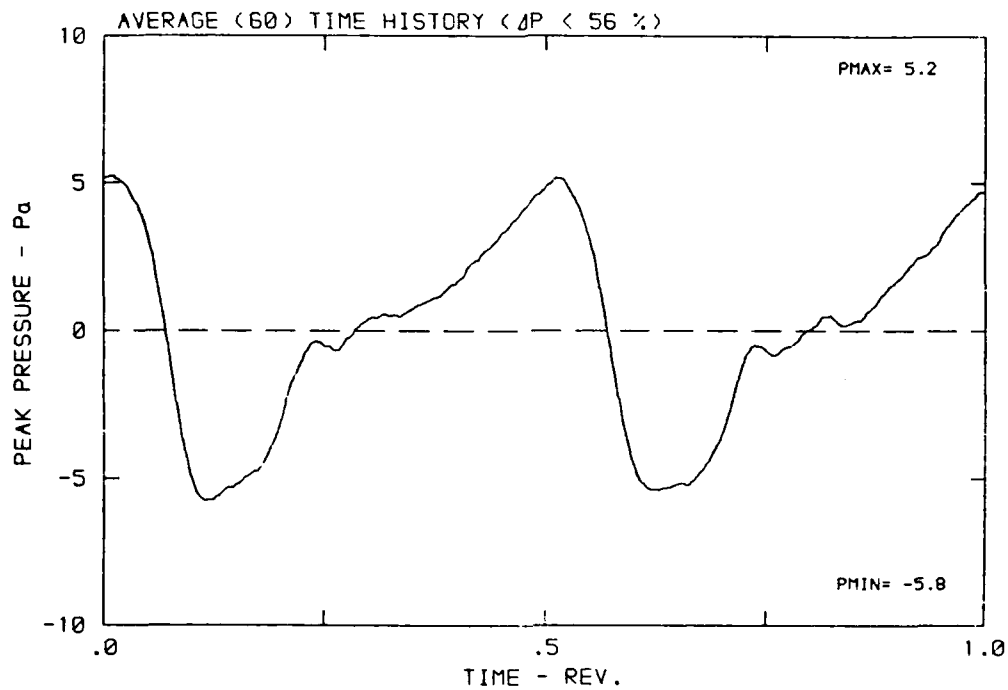
DATA POINT: GC-4 RUN: 145 MP: 5

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



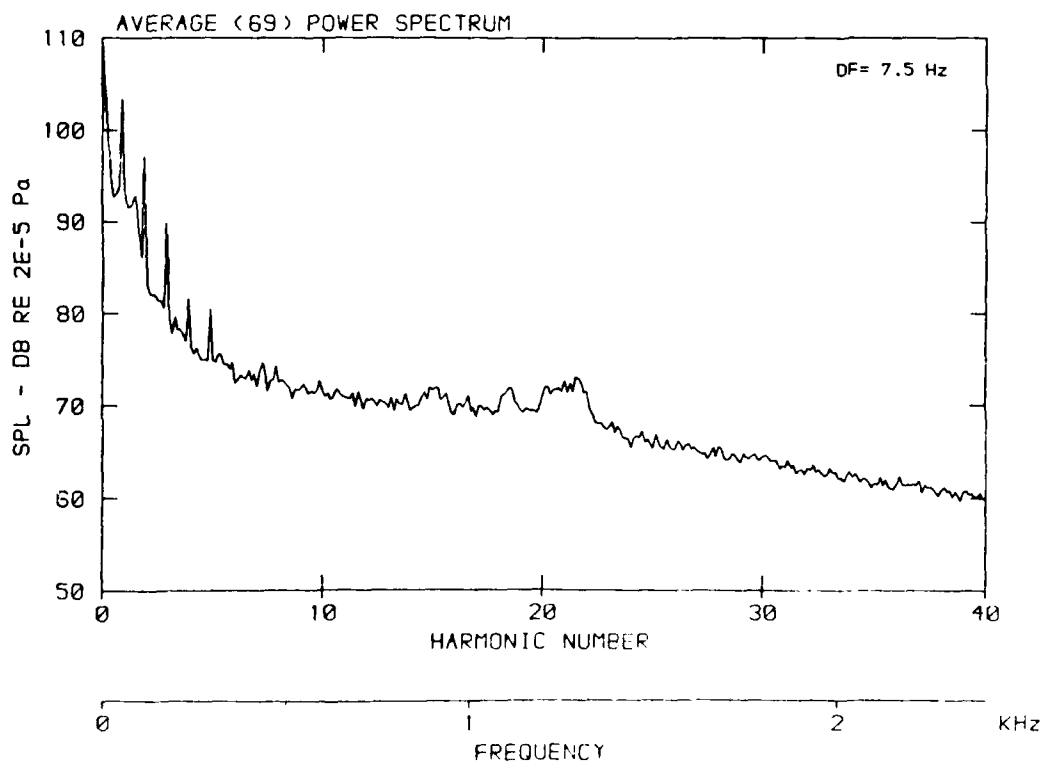
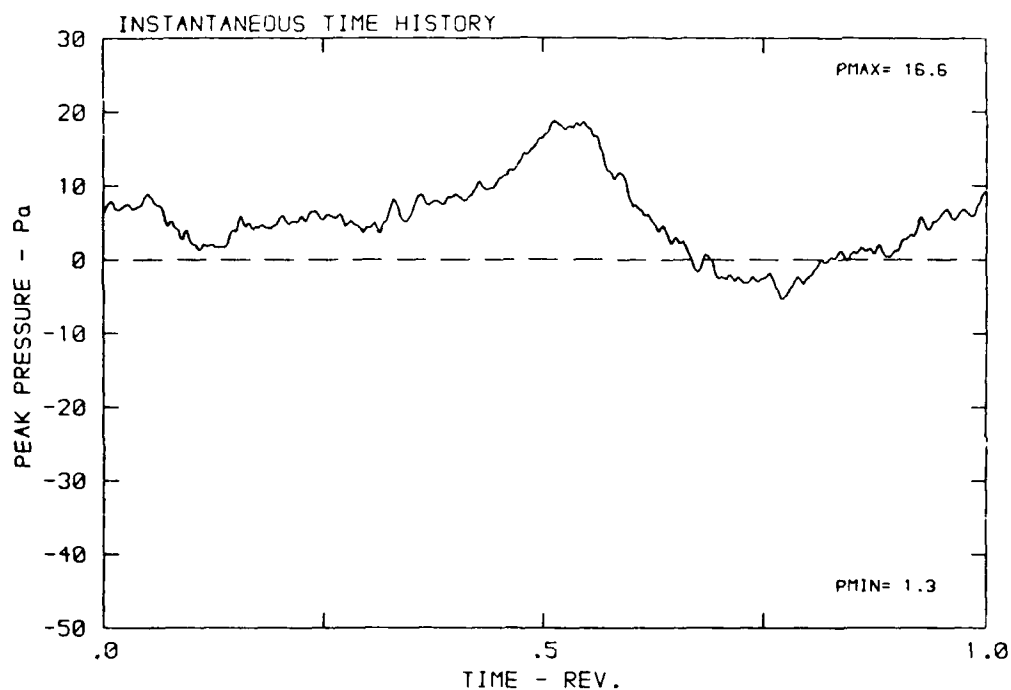
DATA POINT: GC-4 RUN: 145 MP: 5

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



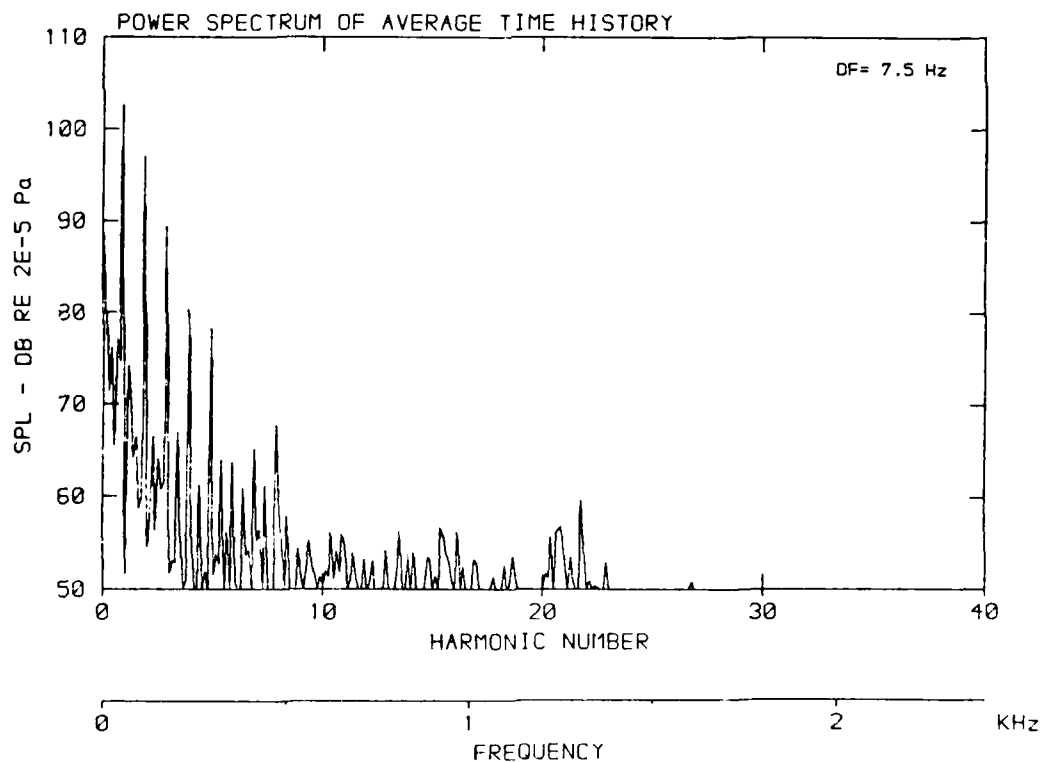
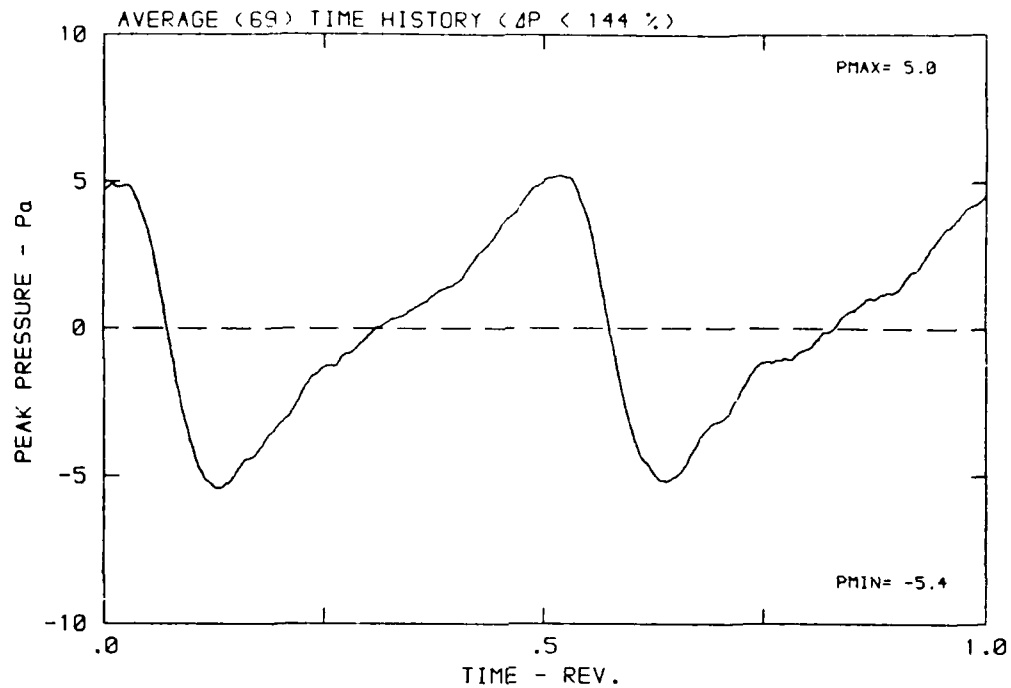
DATA POINT: GC-4 RUN: 145 MP: 6

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° : 285.7 K



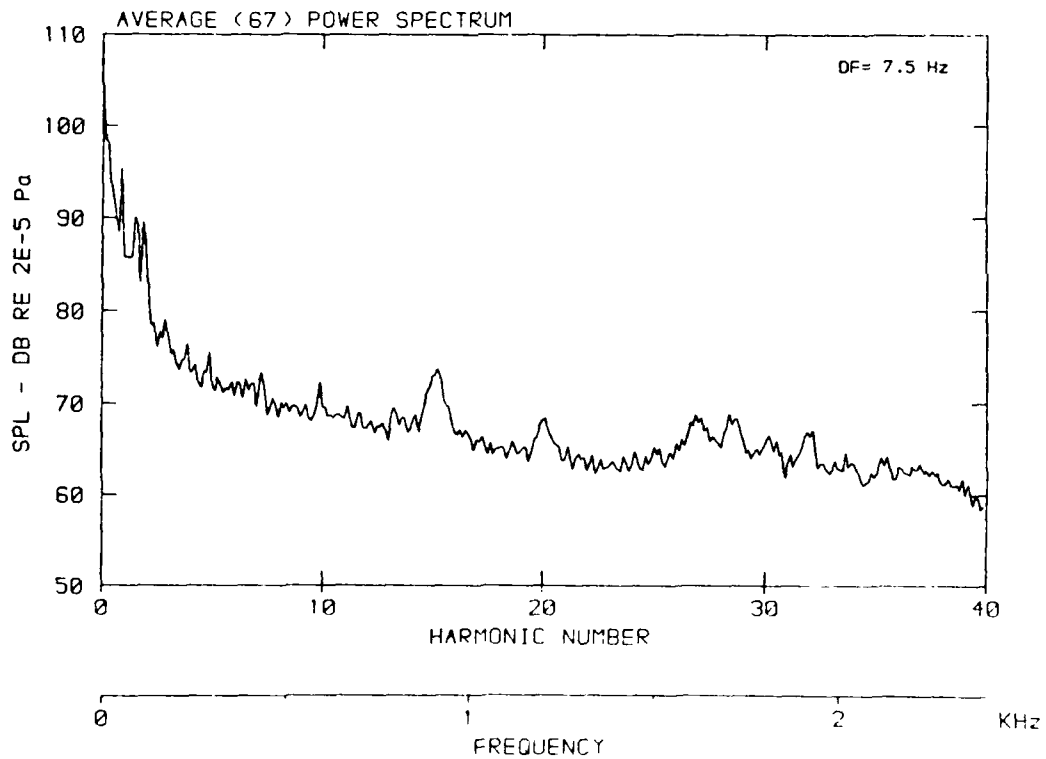
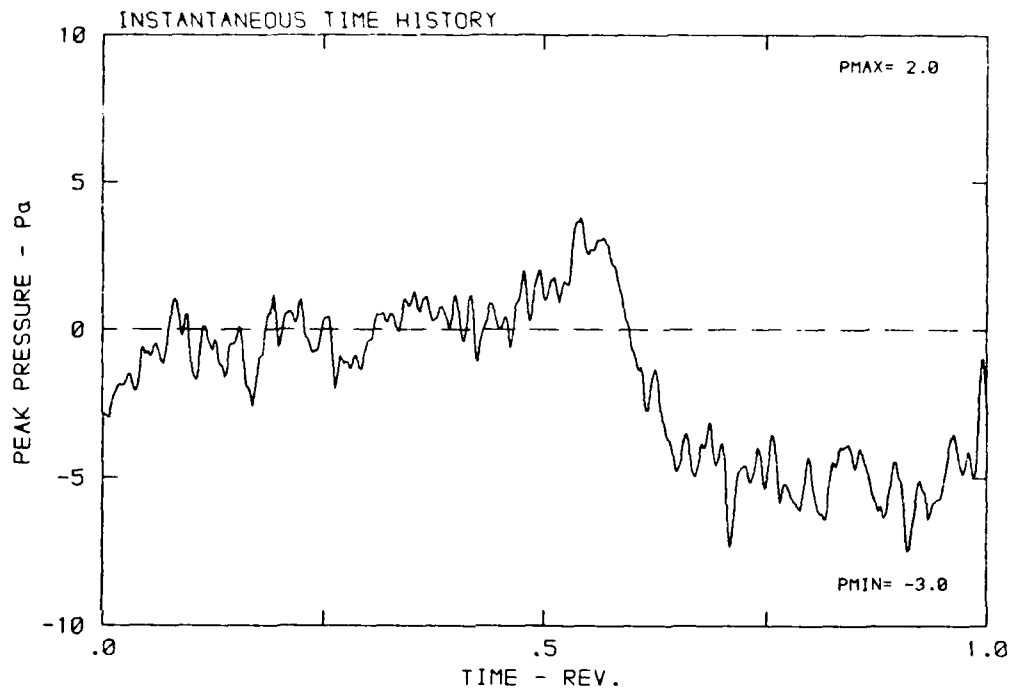
DATA POINT: GC-4 RUN: 145 MP: 6

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



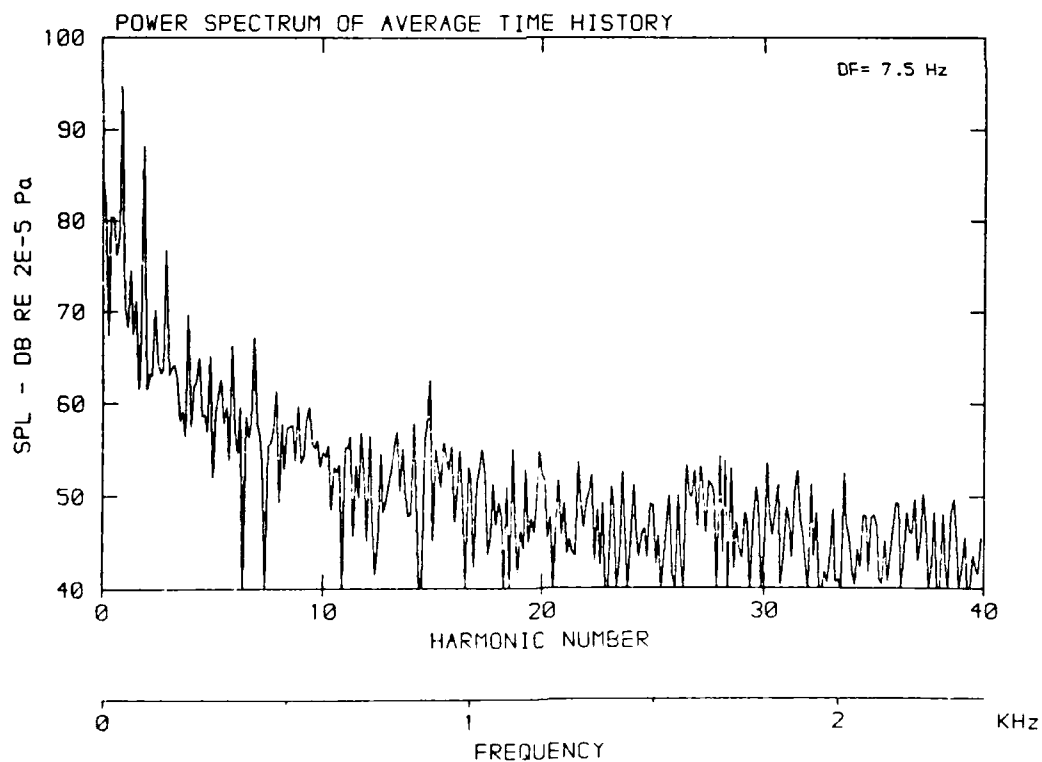
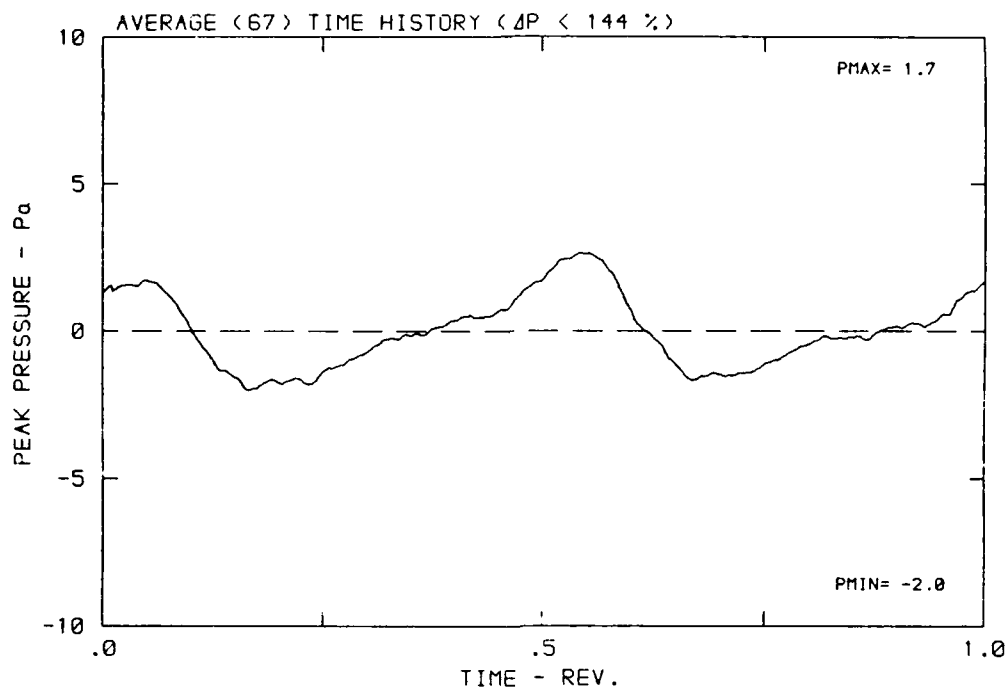
DATA POINT: GC-4 RUN: 145 MP: 7

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



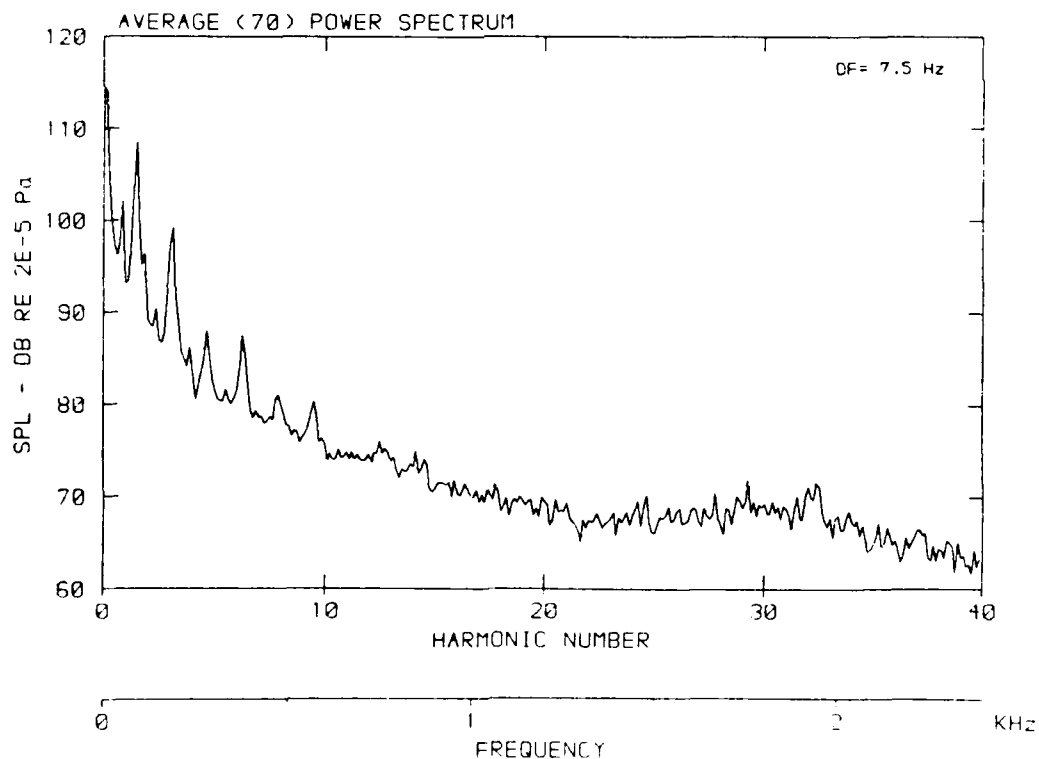
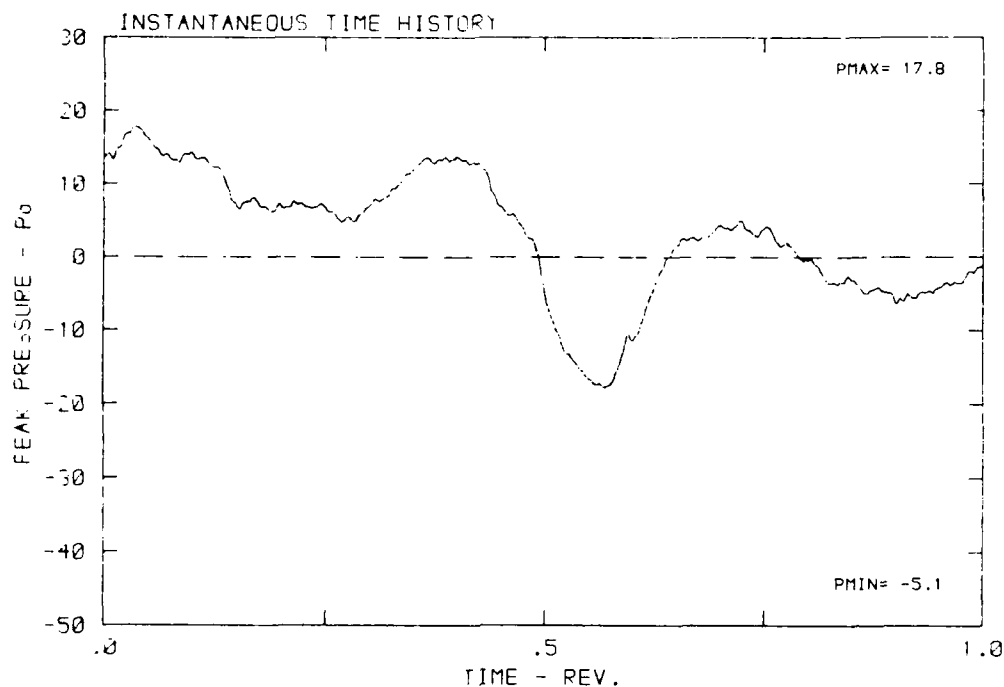
DATA POINT: GC-4 RUN: 145 MP: 7

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



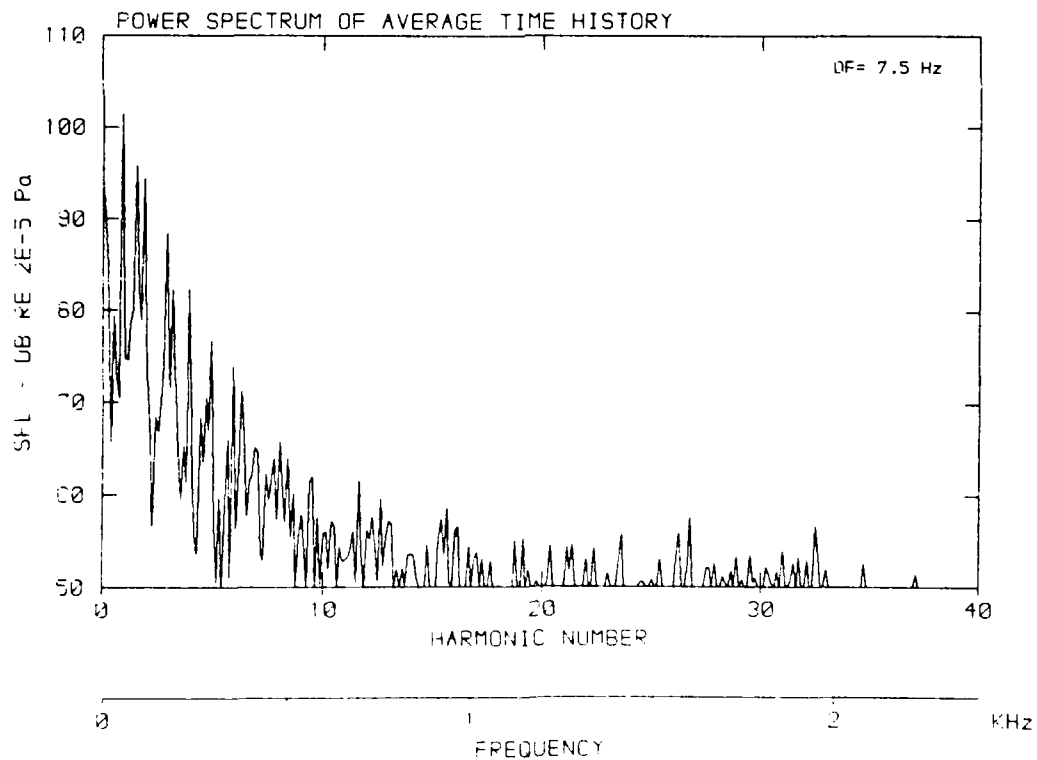
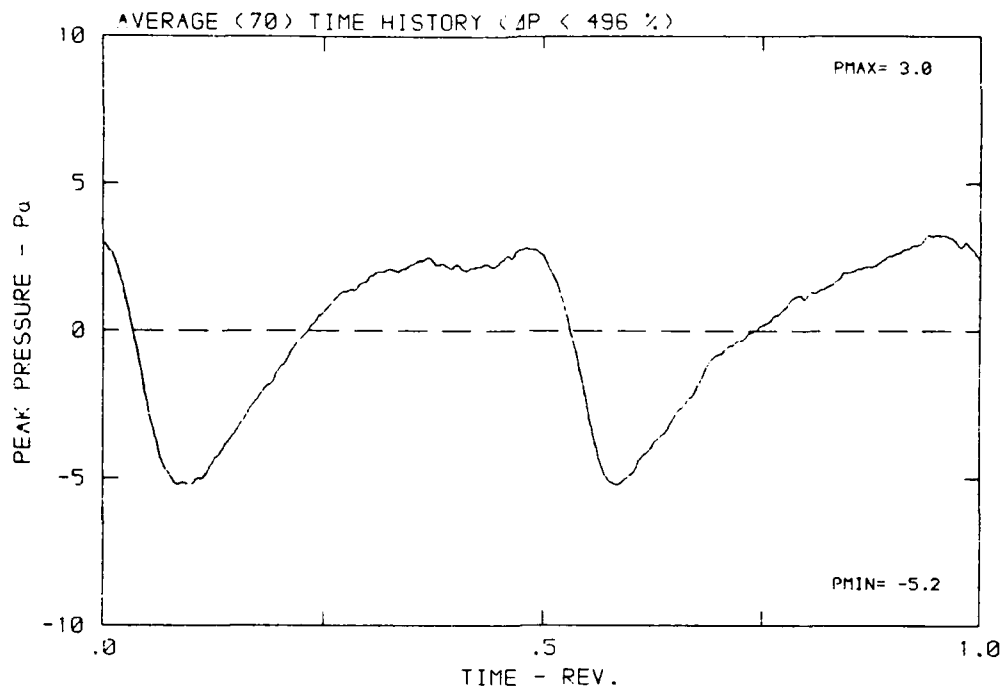
DATA POINT: GC-4 RUN: 145 MP: 8

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° t : 286.7 K



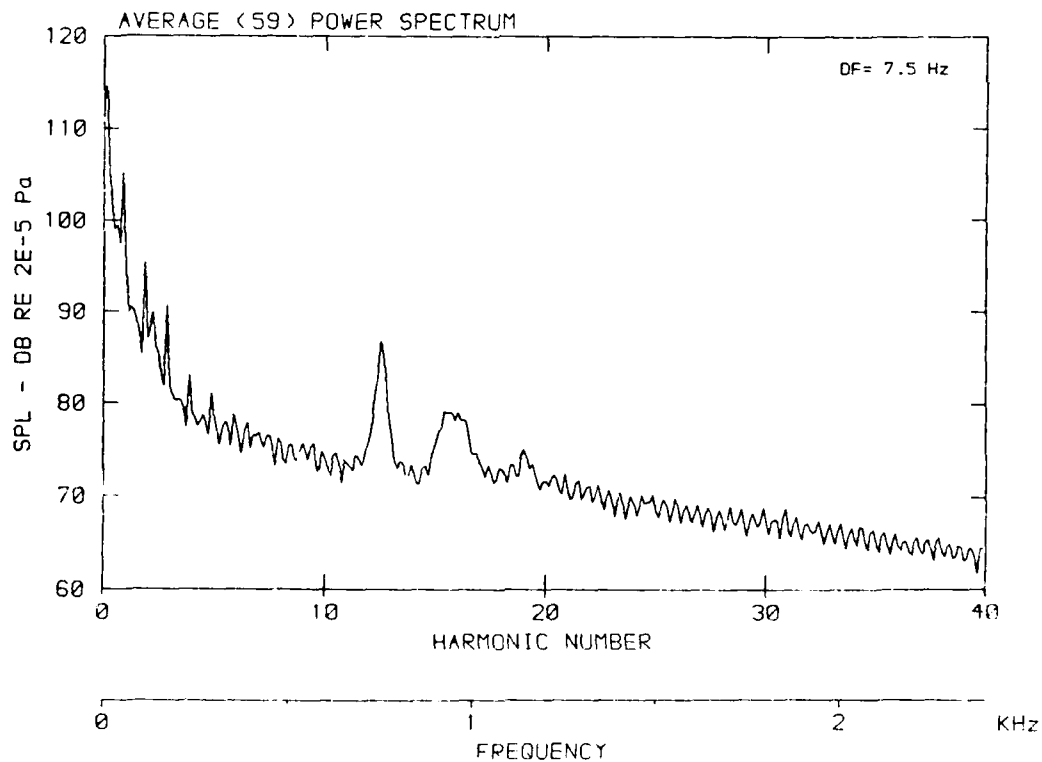
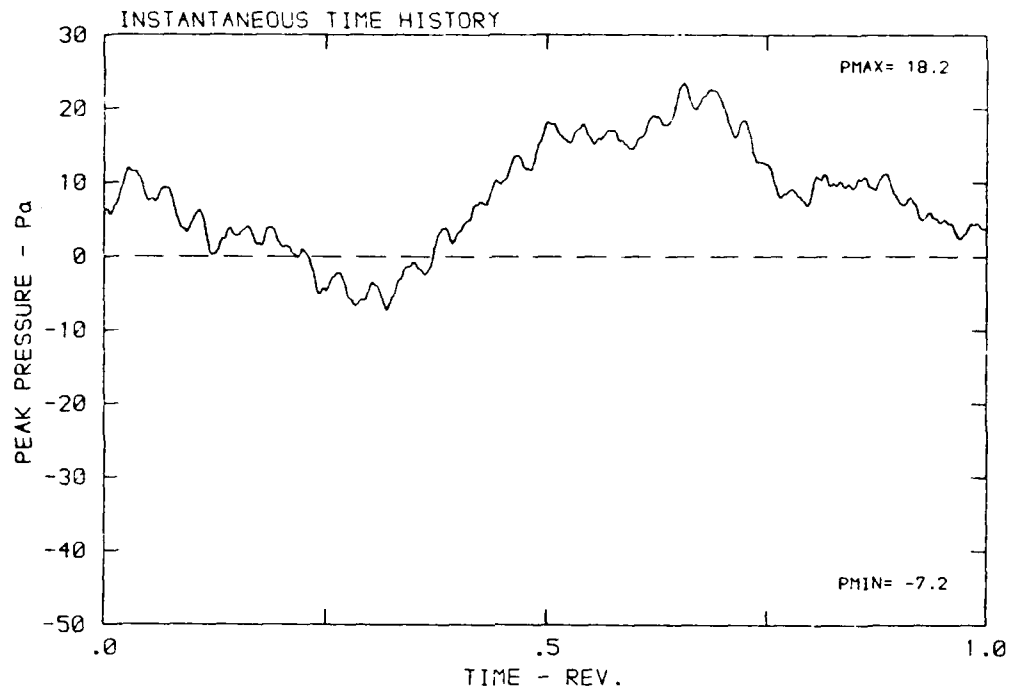
DATA POINT: GC-4 RUN: 145 MP: 8

β : 24.4° MH: .5842 n: 1800 rpm v/u : .269 ϕ : -7.4° T: 286.7 K



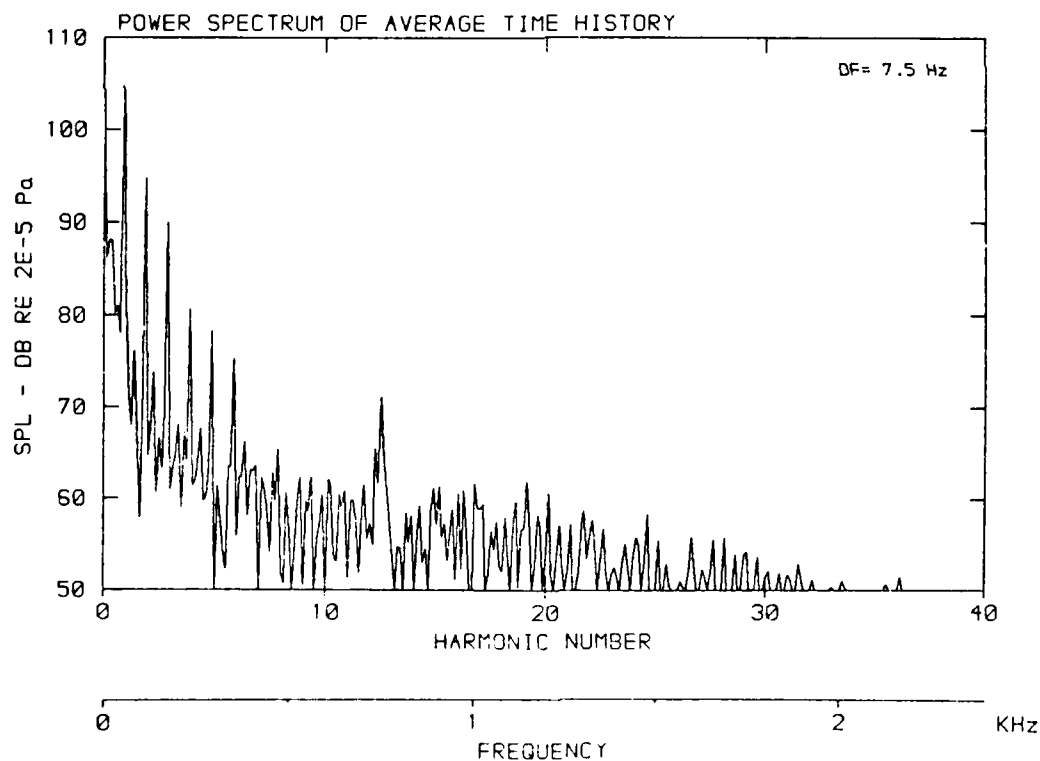
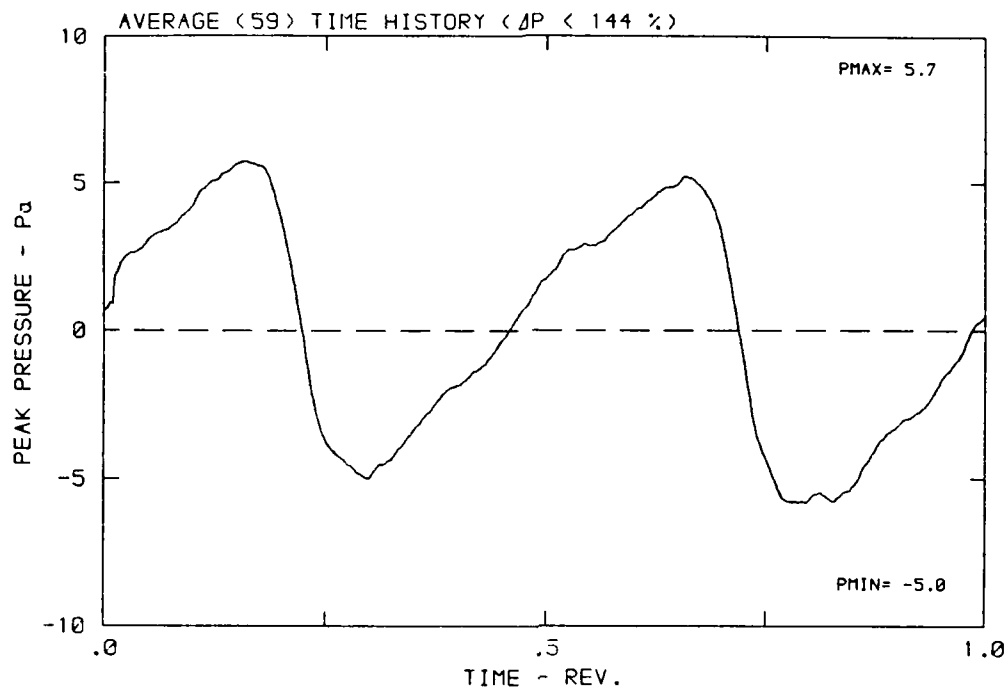
DATA POINT: GC-4 RUN: 145 MP: 9

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



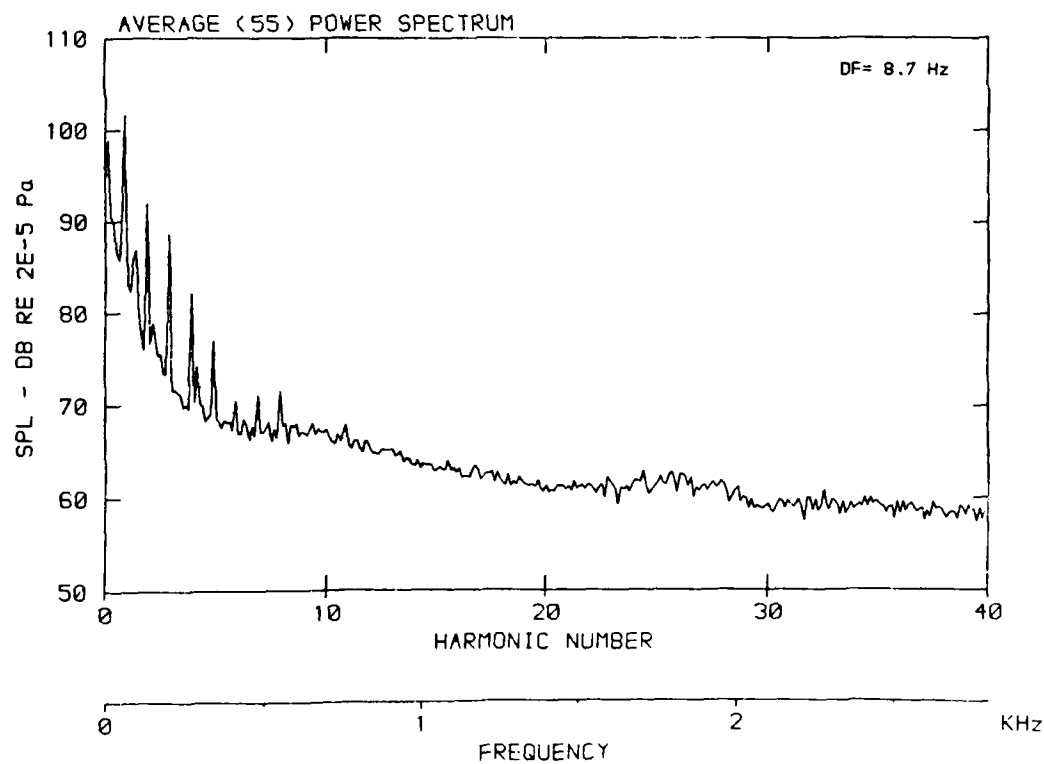
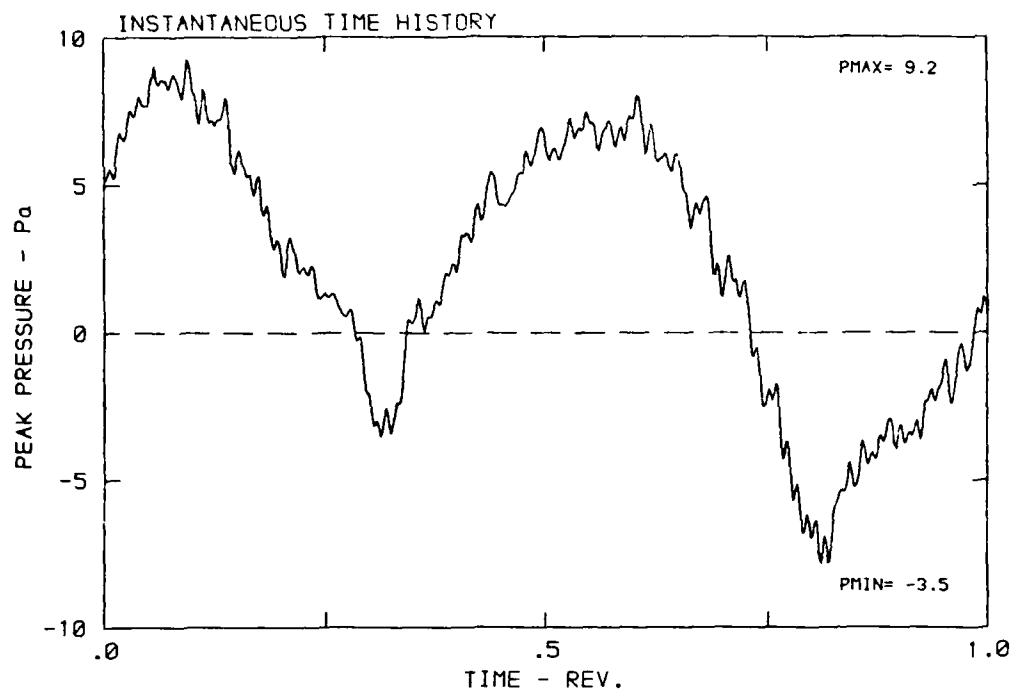
DATA POINT: GC-4 RUN: 145 MP: 9

β : 24.4° MH: .5842 n: 1800 rpm v/u: .269 ϕ : -7.4° T: 286.7 K



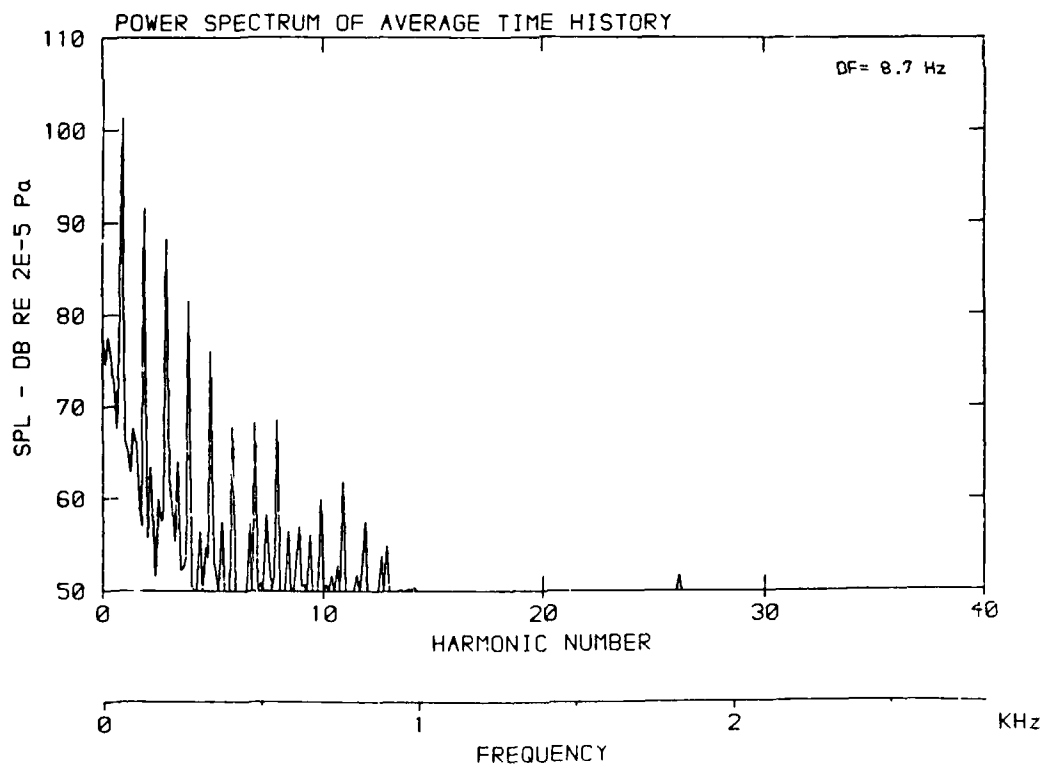
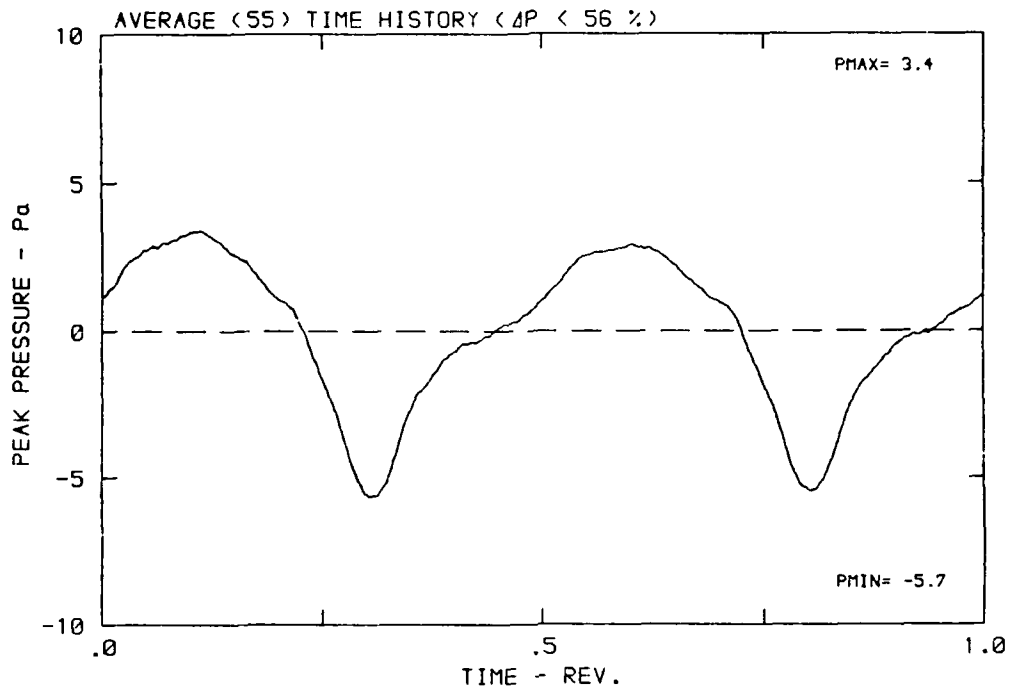
DATA POINT: GC-5 RUN: 146 MP: 1

β : 24.4° MH: .6750 n: 2100 rpm v/u : .231 ϕ : -7.4° T: 287.2 K



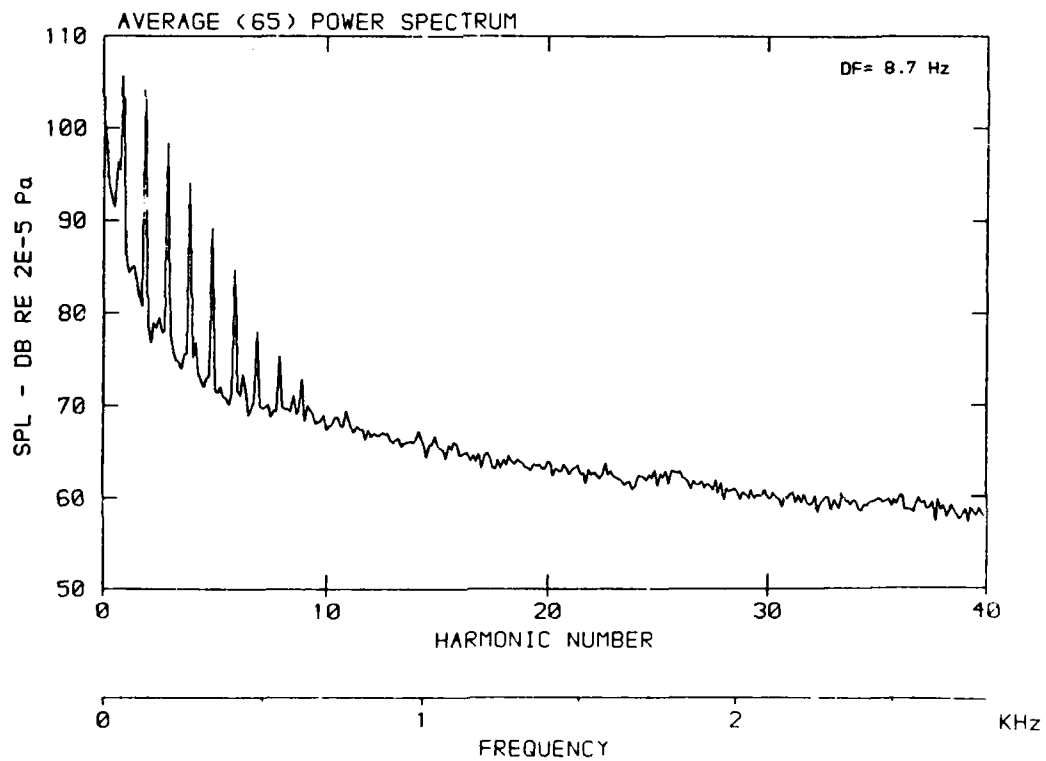
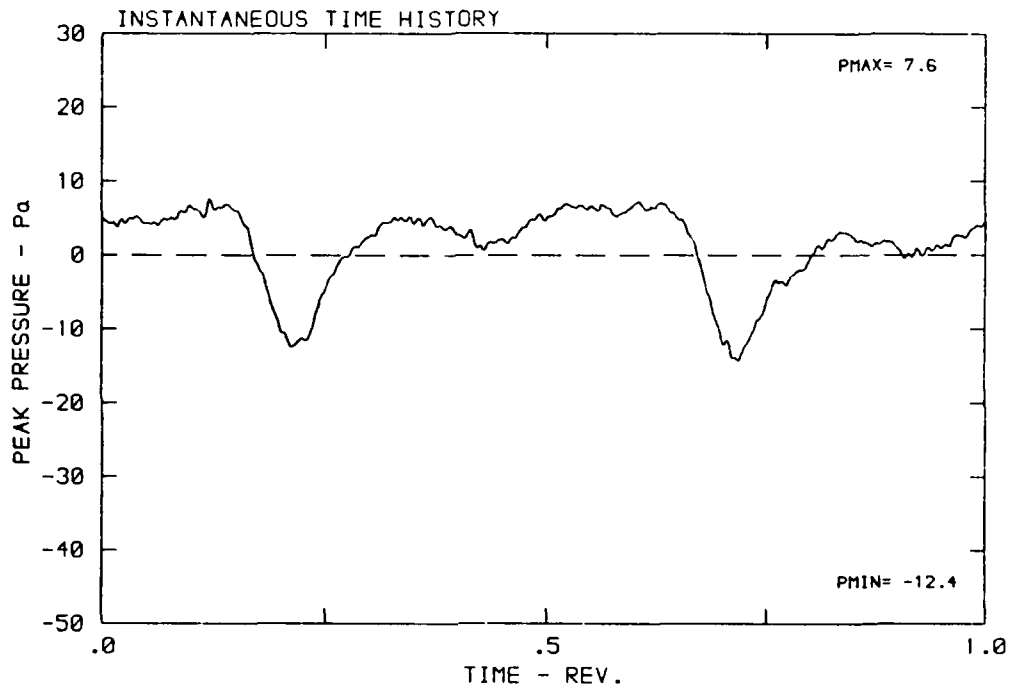
DATA POINT: GC-5 RUN: 146 MP: 1

β : 24.4° MH: .6750 n: 2100 rpm v/u : .231 ϕ : -7.4° T: 287.2 K



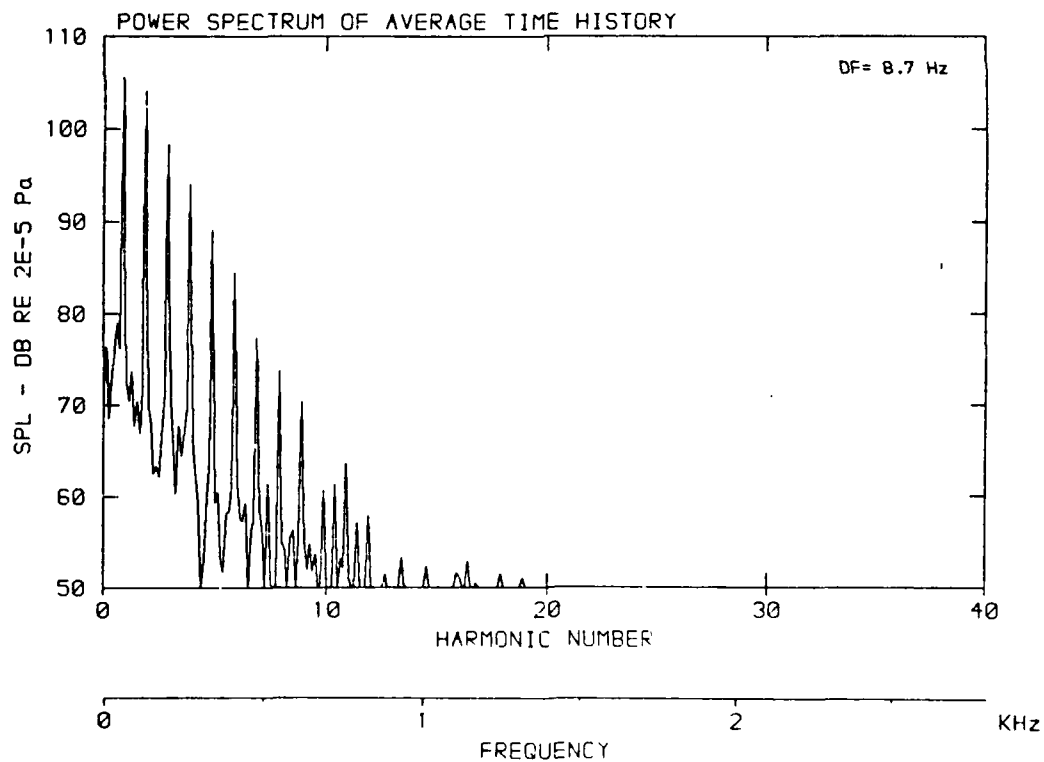
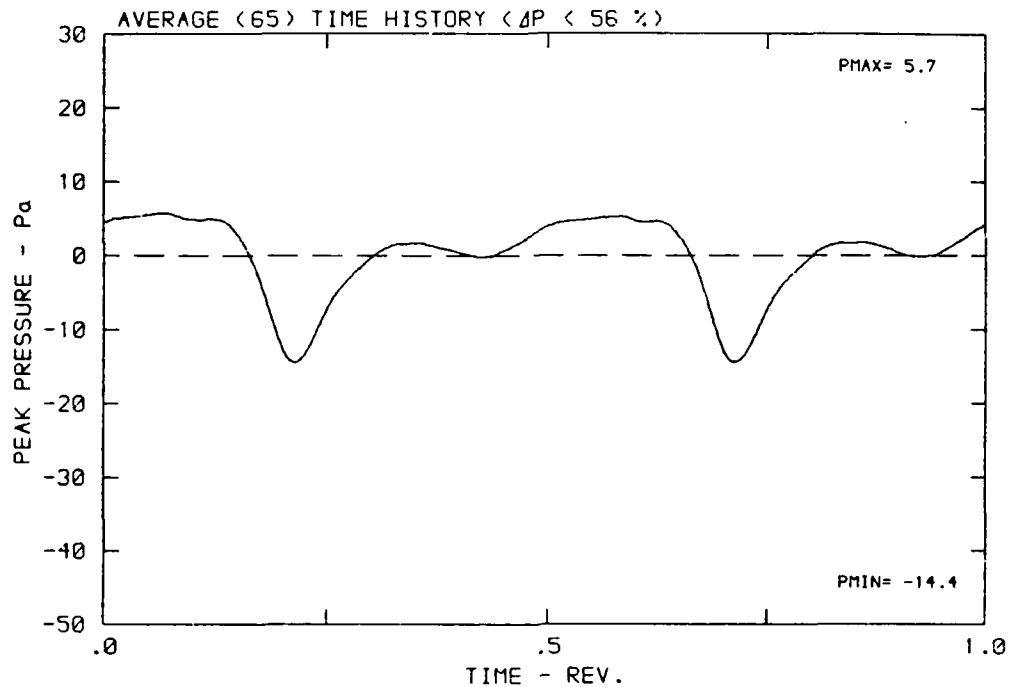
DATA POINT: GC-5 RUN: 146 MP: 2

β : 24.4° MH: .6750 n: 2100 rpm v/u : .231 ϕ : -7.4° T: 287.2 K



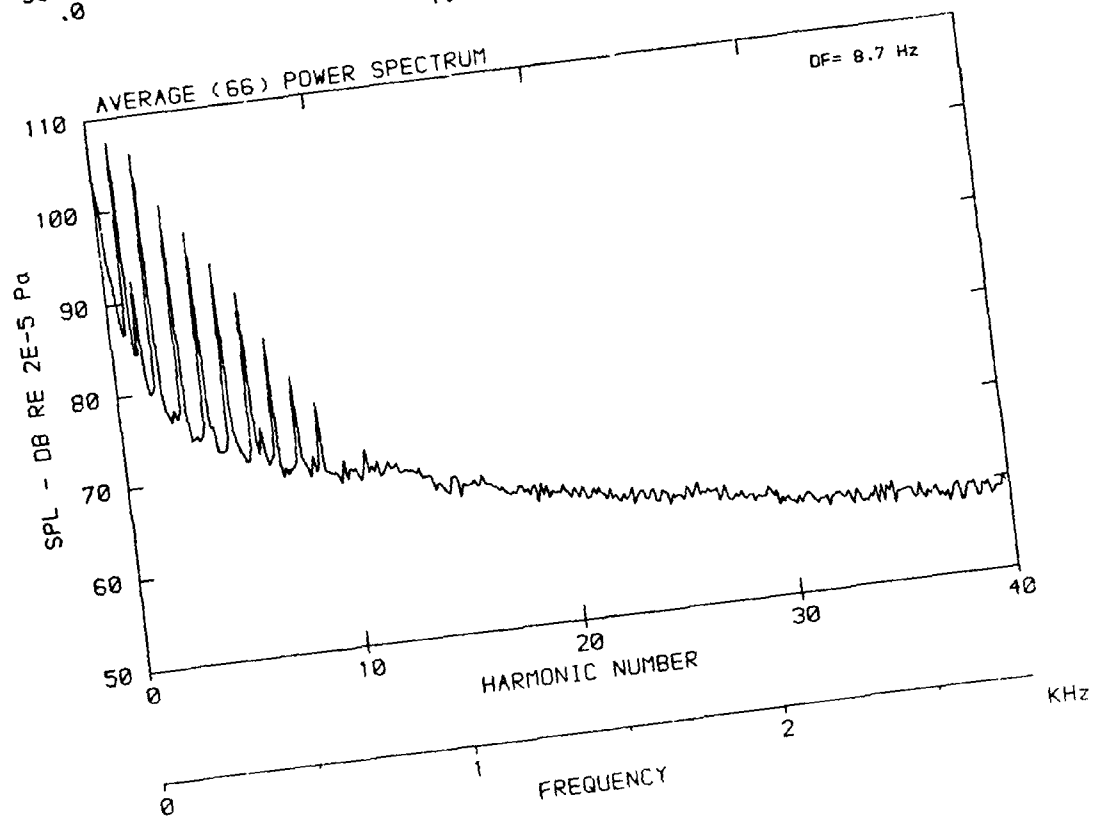
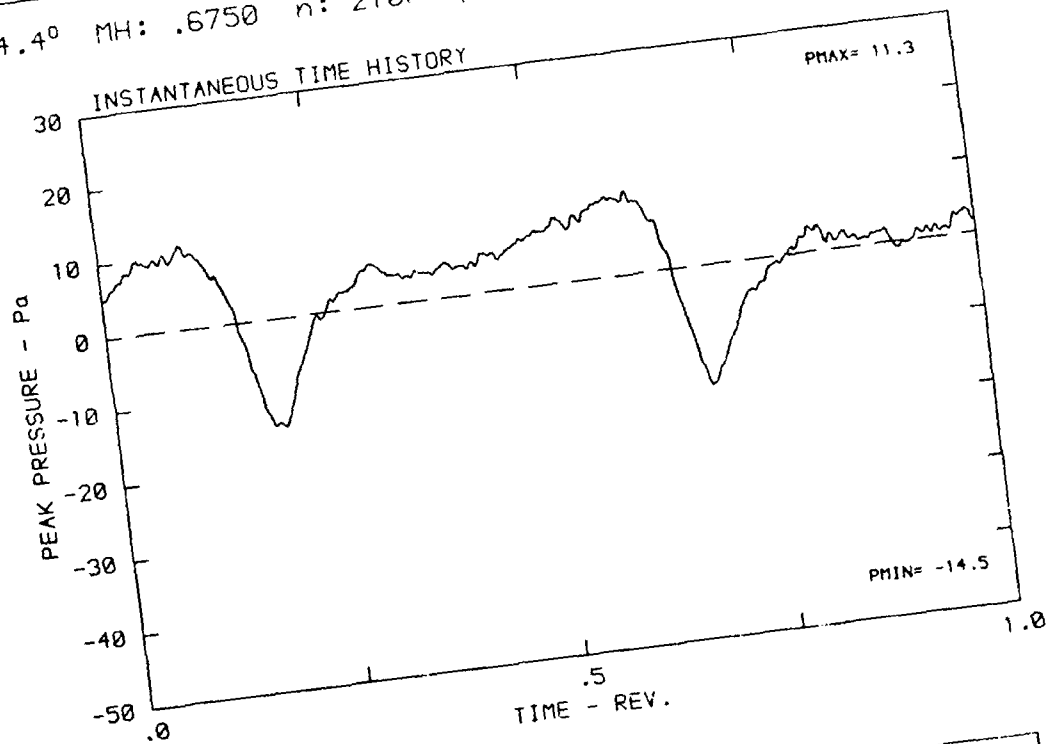
DATA POINT: GC-5 RUN: 146 MP: 2

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



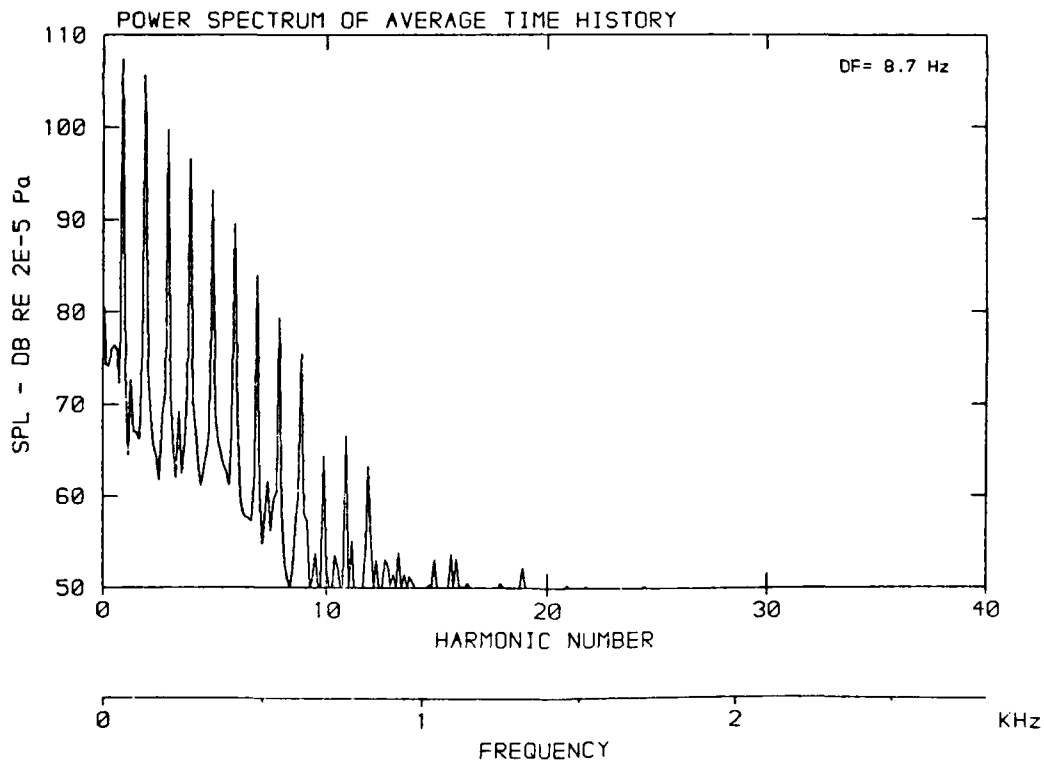
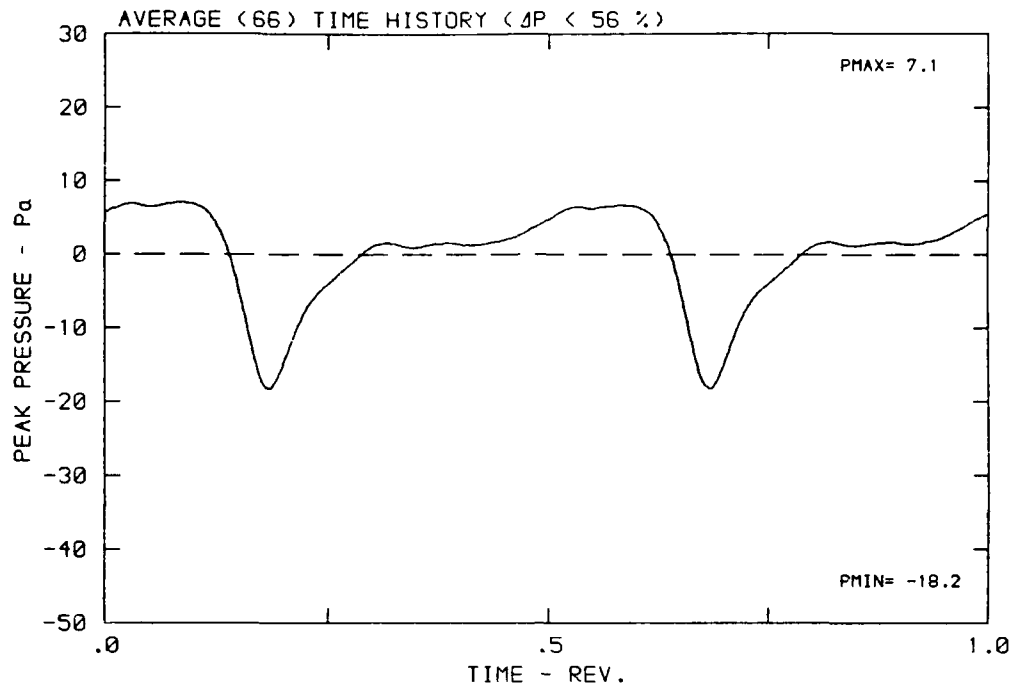
DATA POINT: GC-5 RUN: 146 MP: 3

β : 24.4° MH: .6750 n: 2100 rpm v/u : .231 ϕ : -7.4° T: 287.2 K



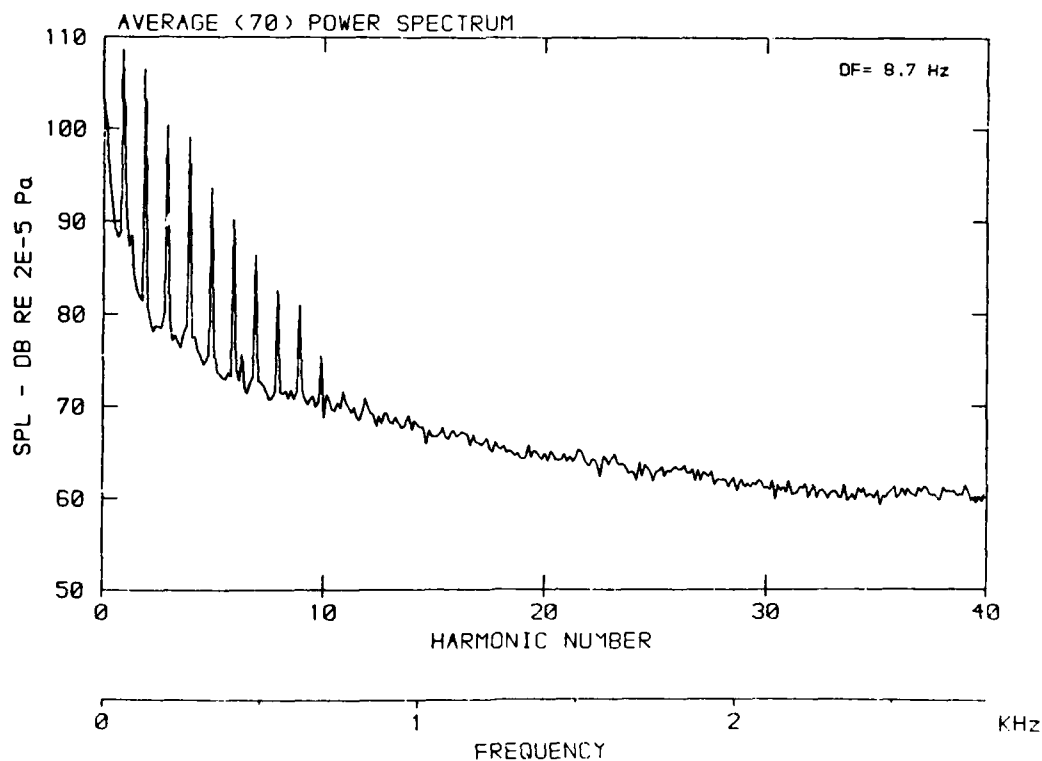
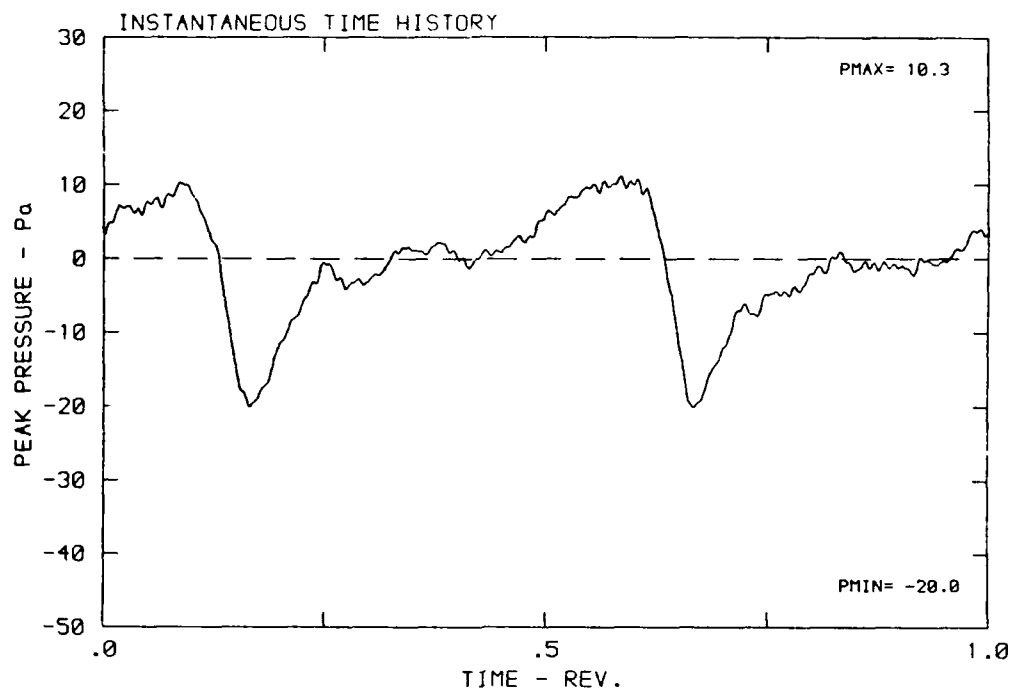
DATA POINT: GC-5 RUN: 146 MP: 3

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



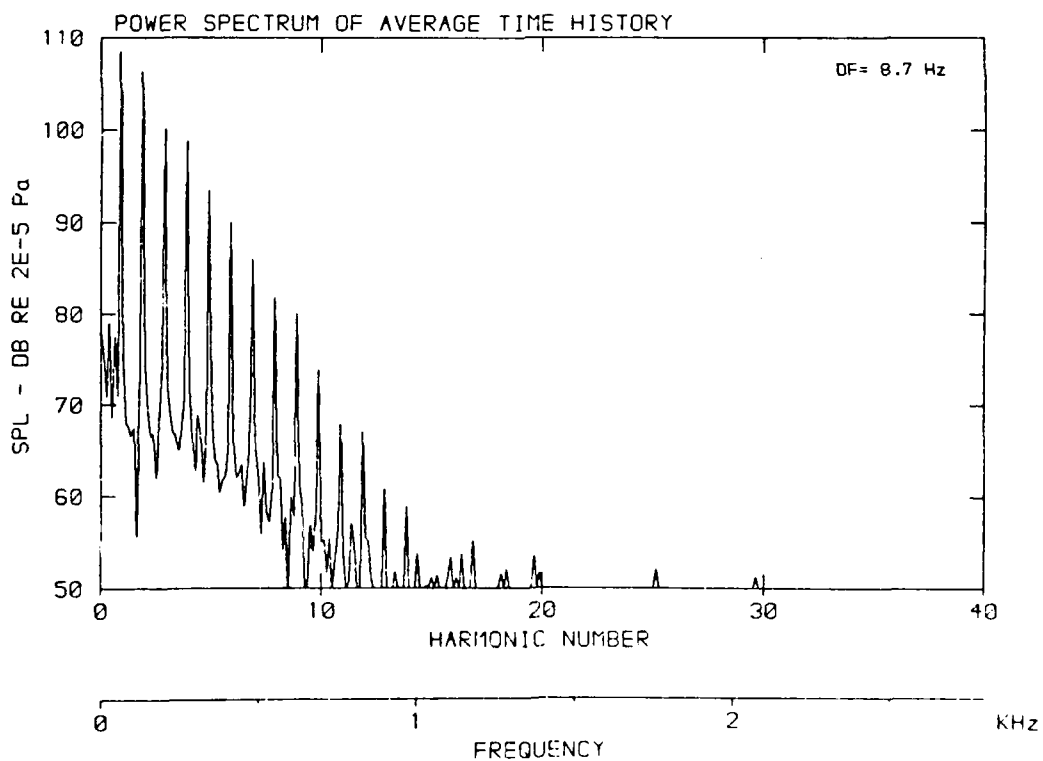
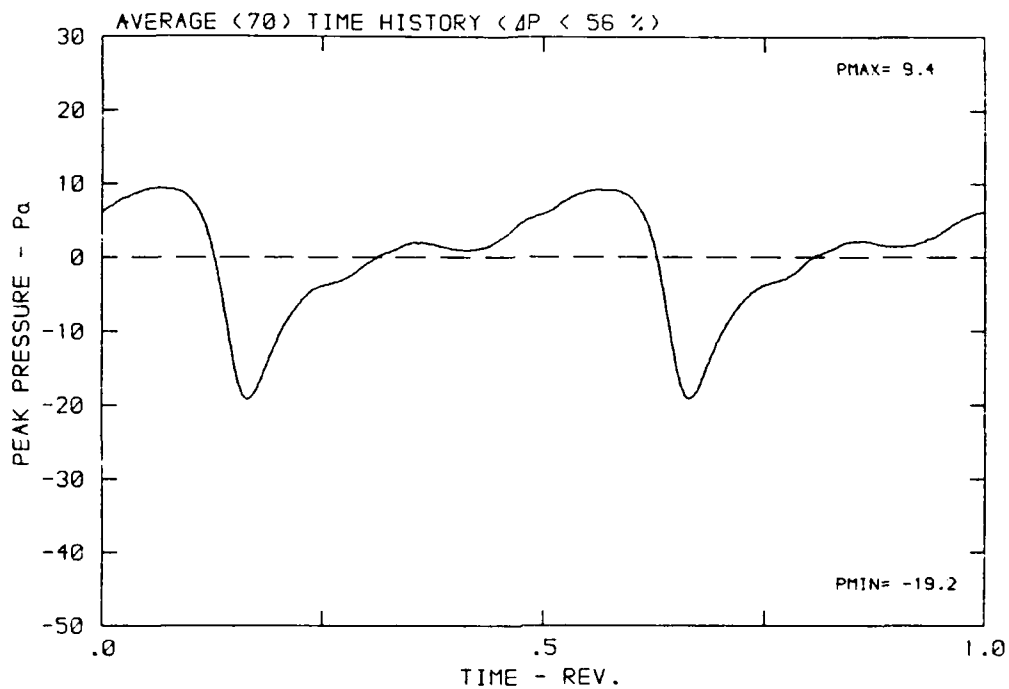
DATA POINT: GC-5 RUN: 146 MP: 4

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



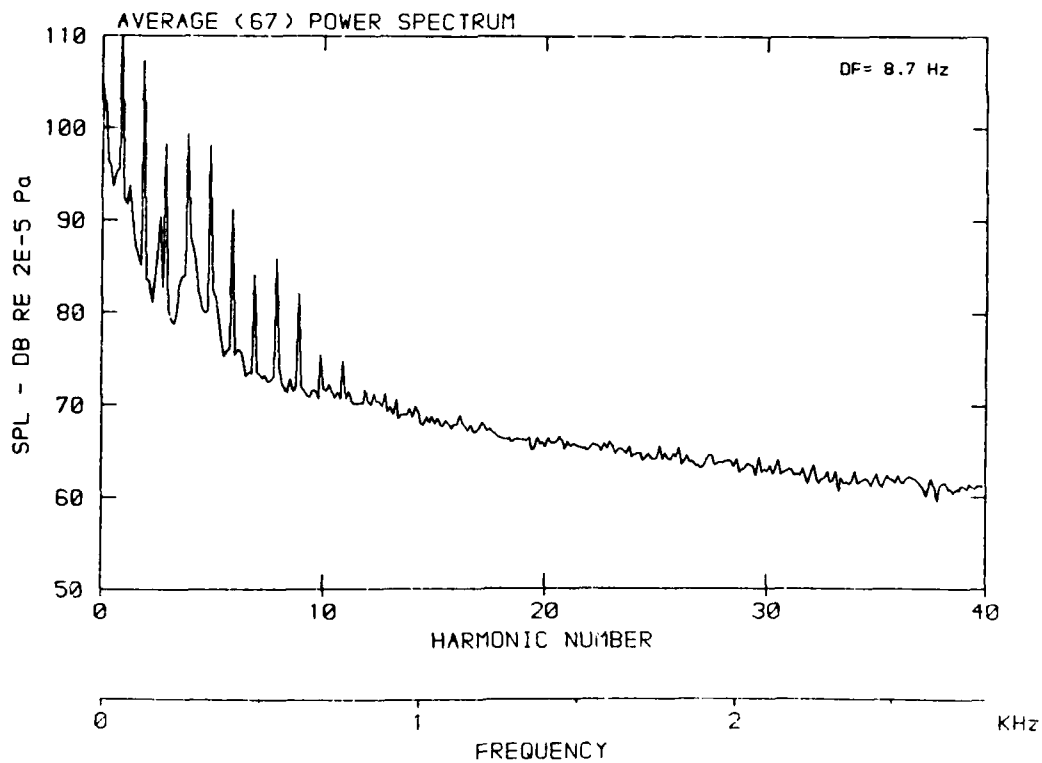
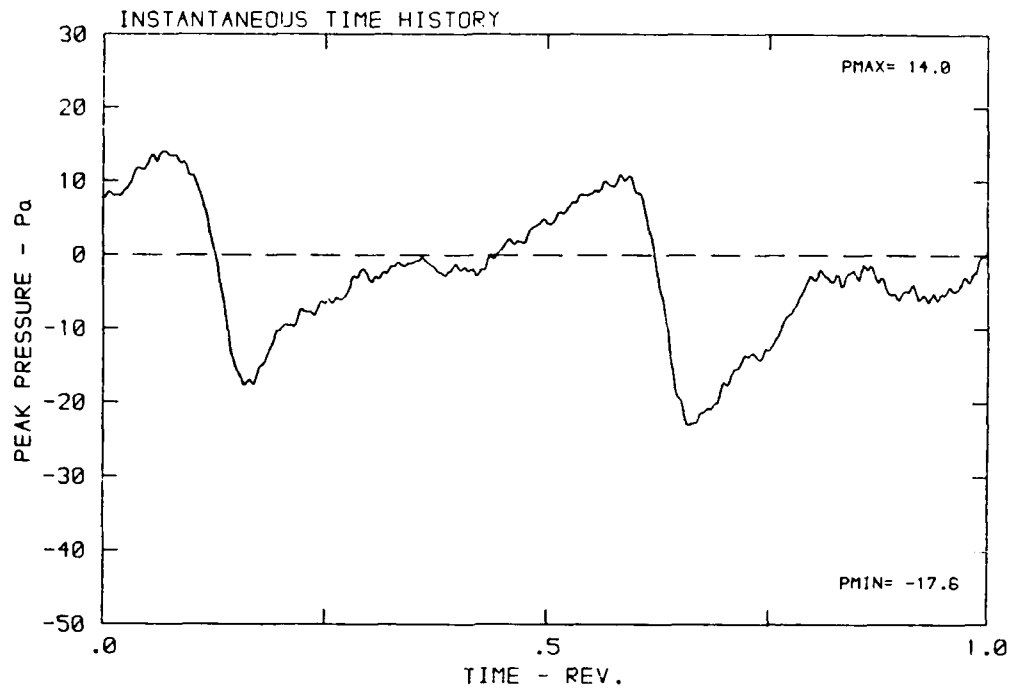
DATA POINT: GC-5 RUN: 146 MP: 4

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



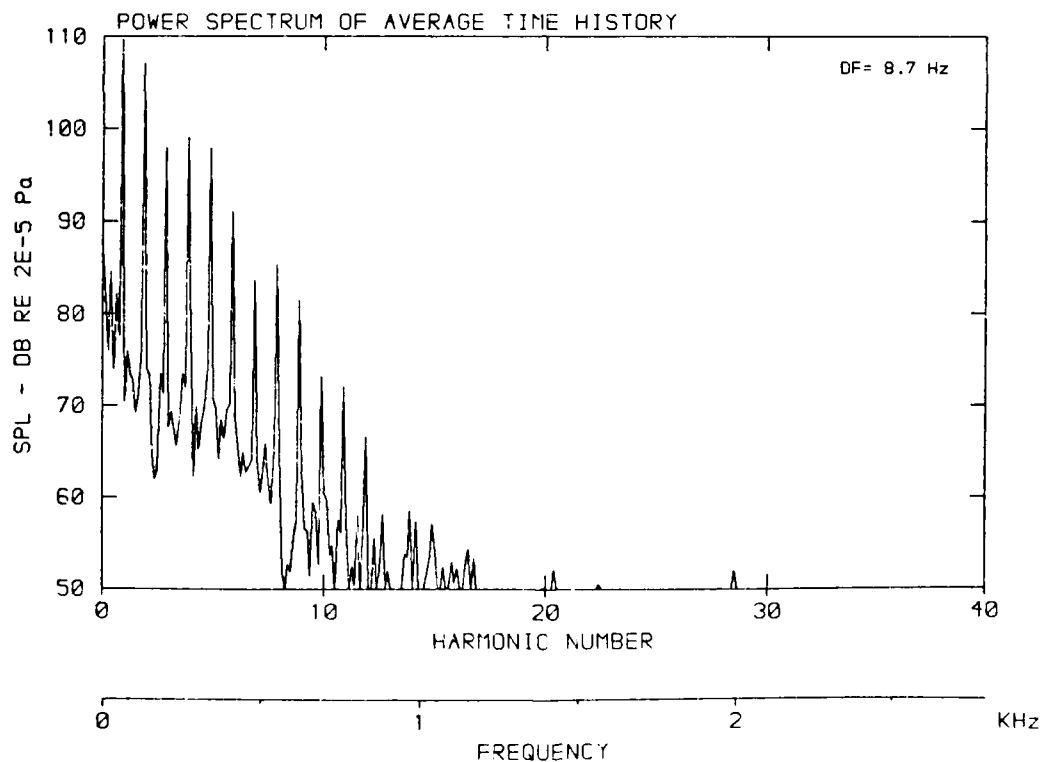
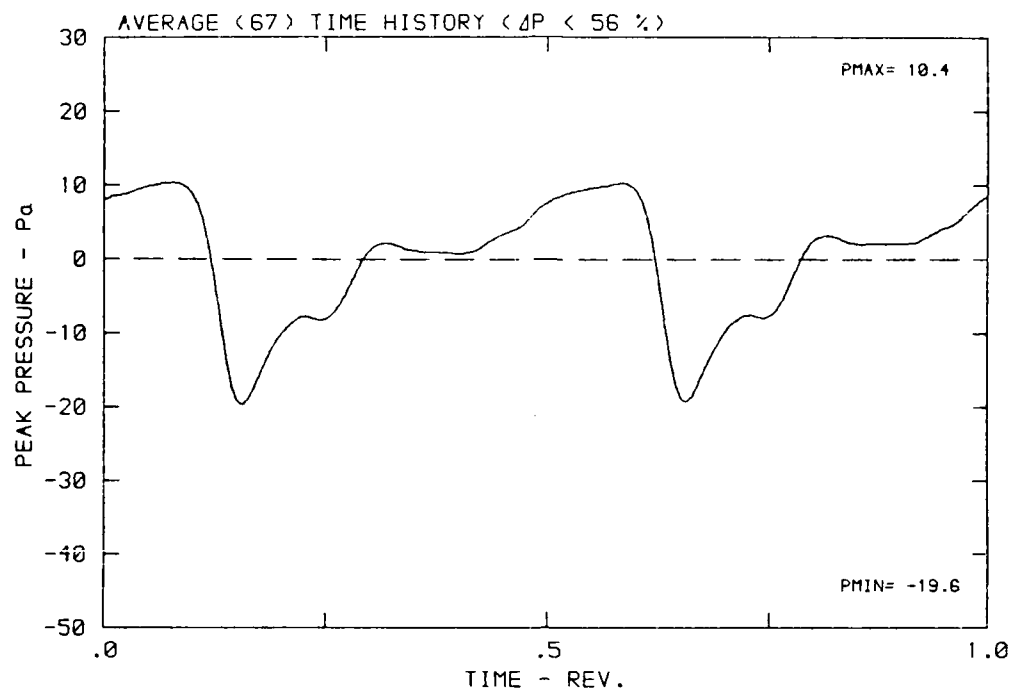
DATA POINT: GC-5 RUN: 146 MP: 5

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



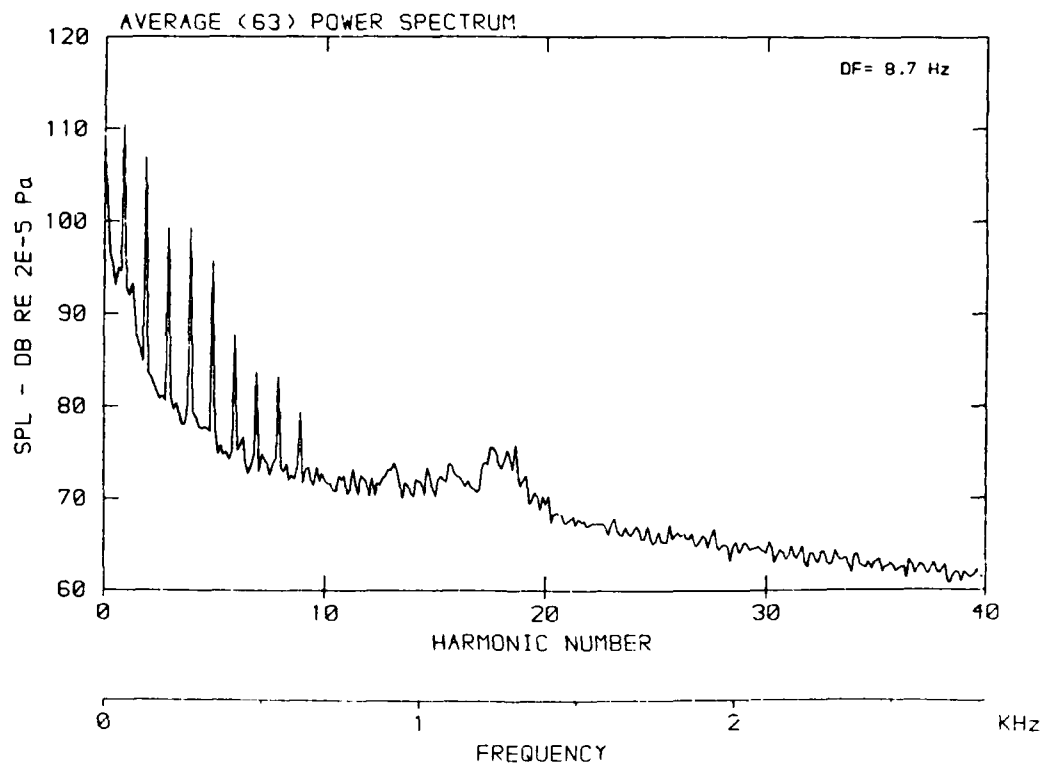
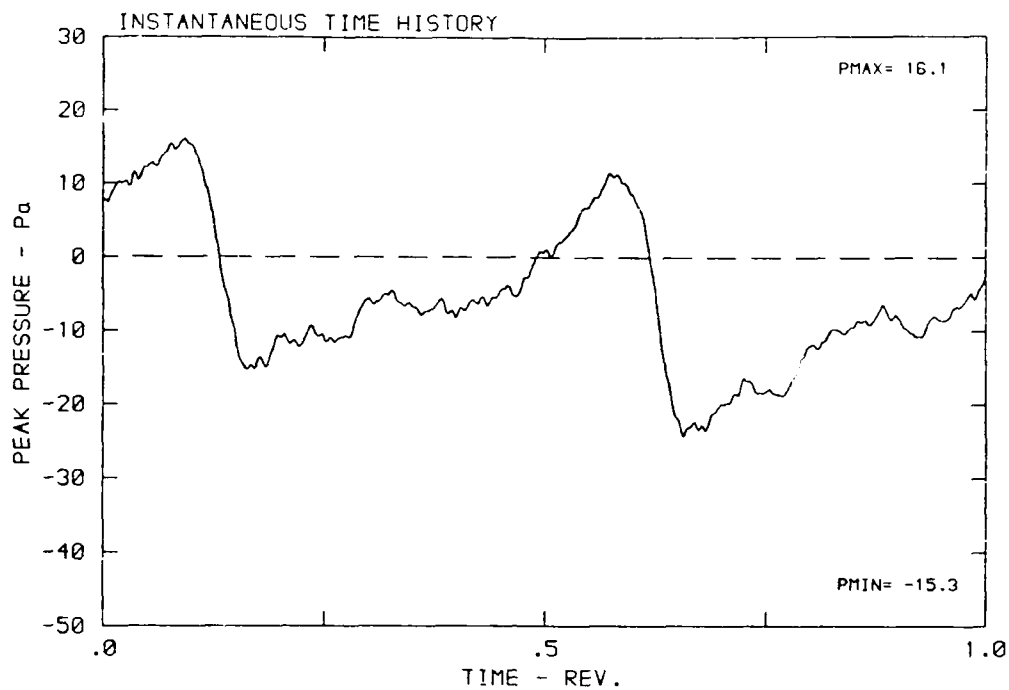
DATA POINT: GC-5 RUN: 146 MP: 5

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



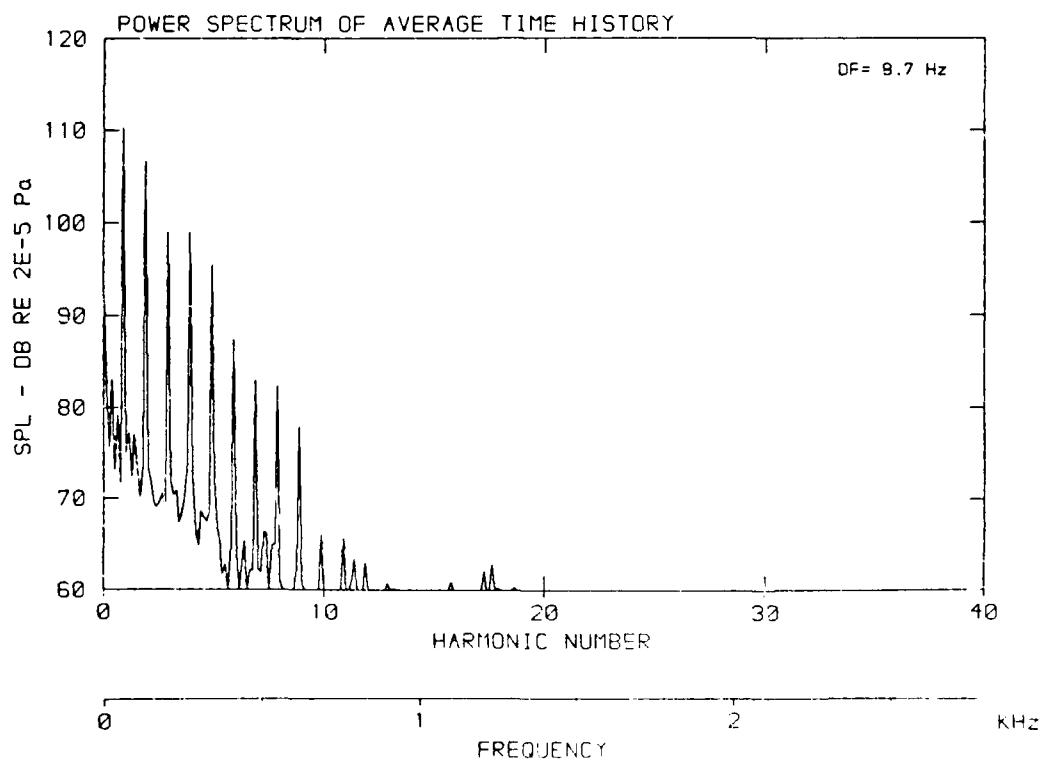
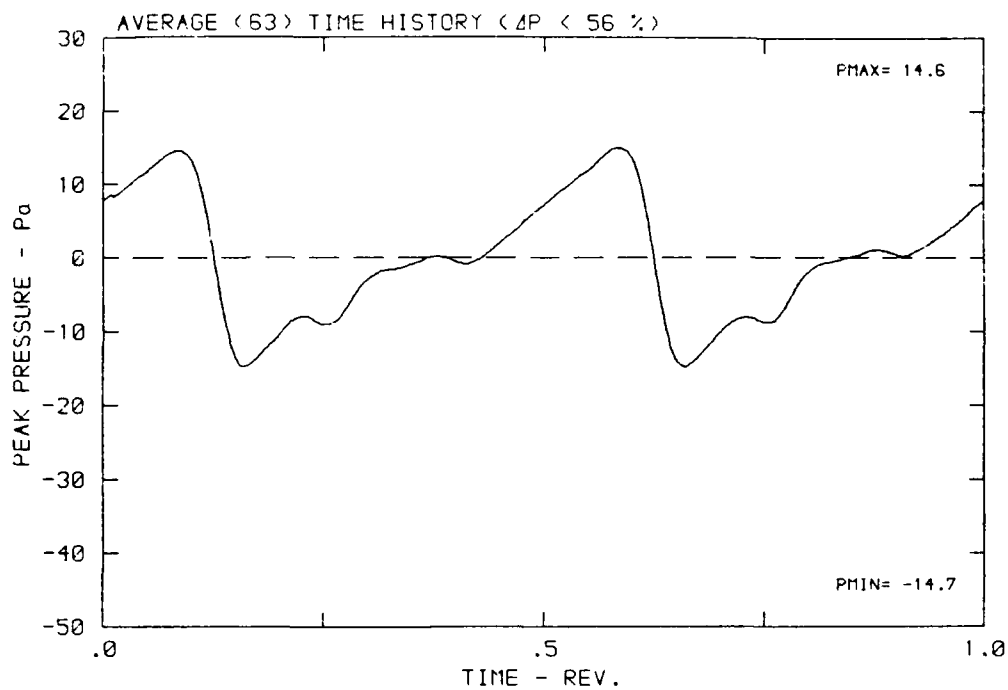
DATA POINT: GC-5 RUN: 146 MP: 6

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 267.2 K



DATA POINT: GC-5 RUN: 146 MP: 6

β : 24.4° MH: .6750 n: 2100 rpm v/u : .231 ϕ : -7.4° T: 287.2 K



AD-A174 981

DFVLR/FAA (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER

2/6

LUFT UND RAUMFAHR (U) DEUTSCHE FORSCHUNGS- UND

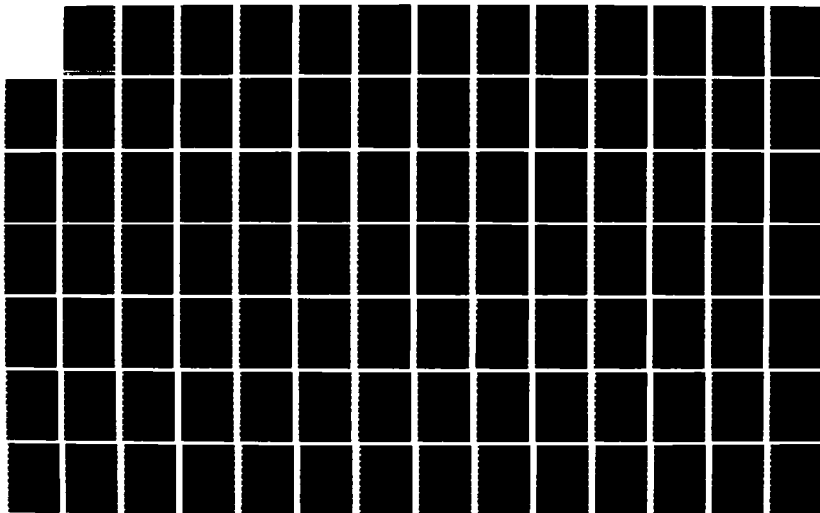
VERSUCHSANSTALT FUER LUFT- UND RAUMF

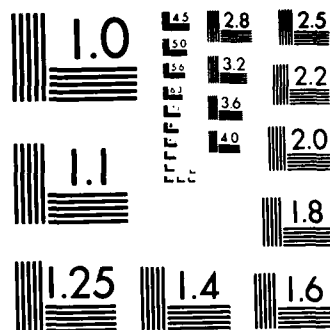
UNCLASSIFIED

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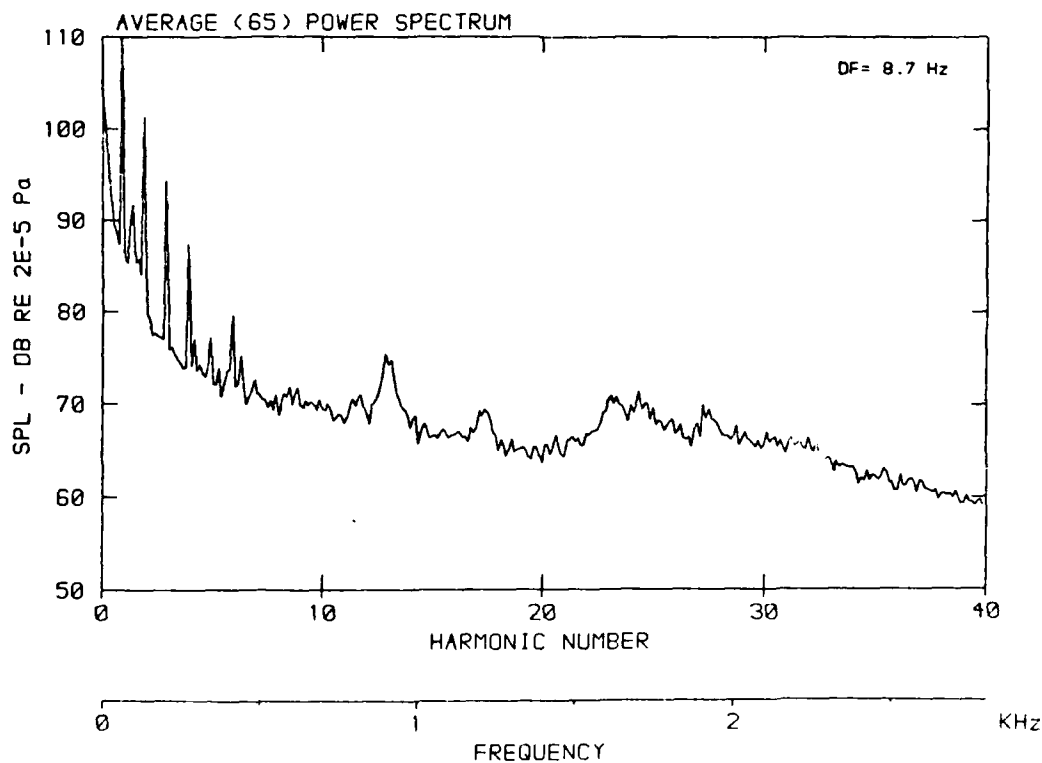
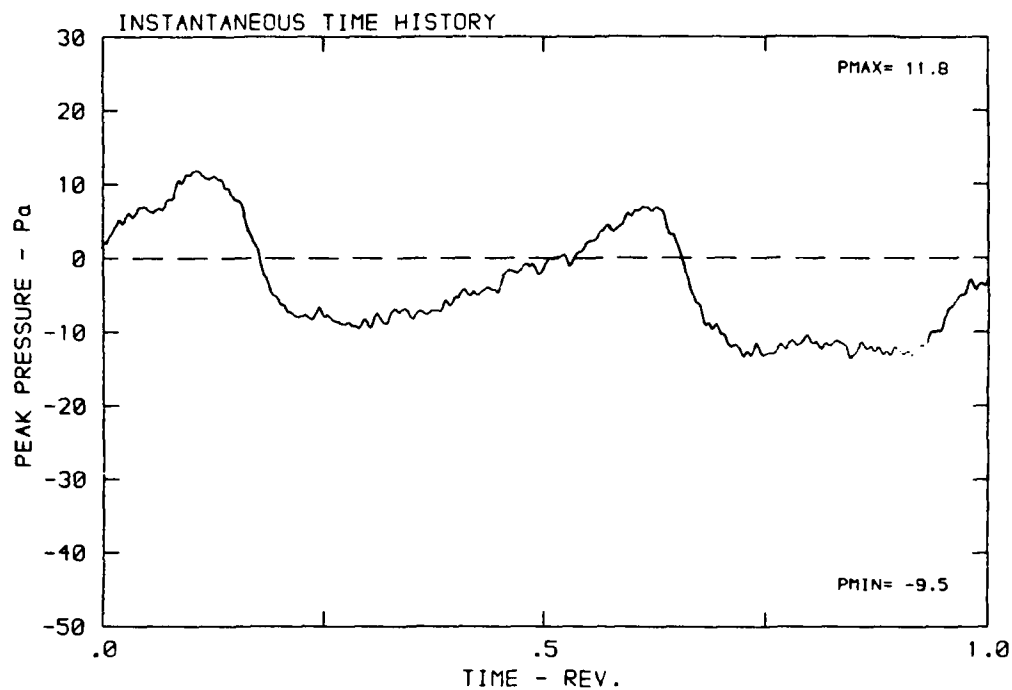




MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963 A

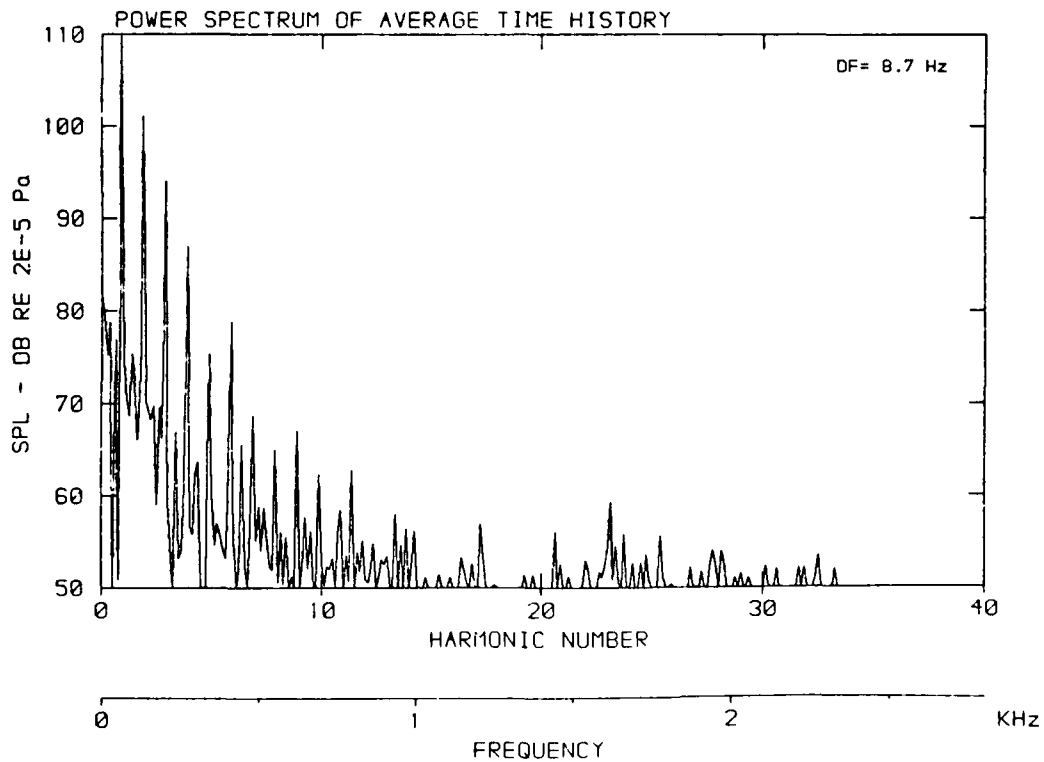
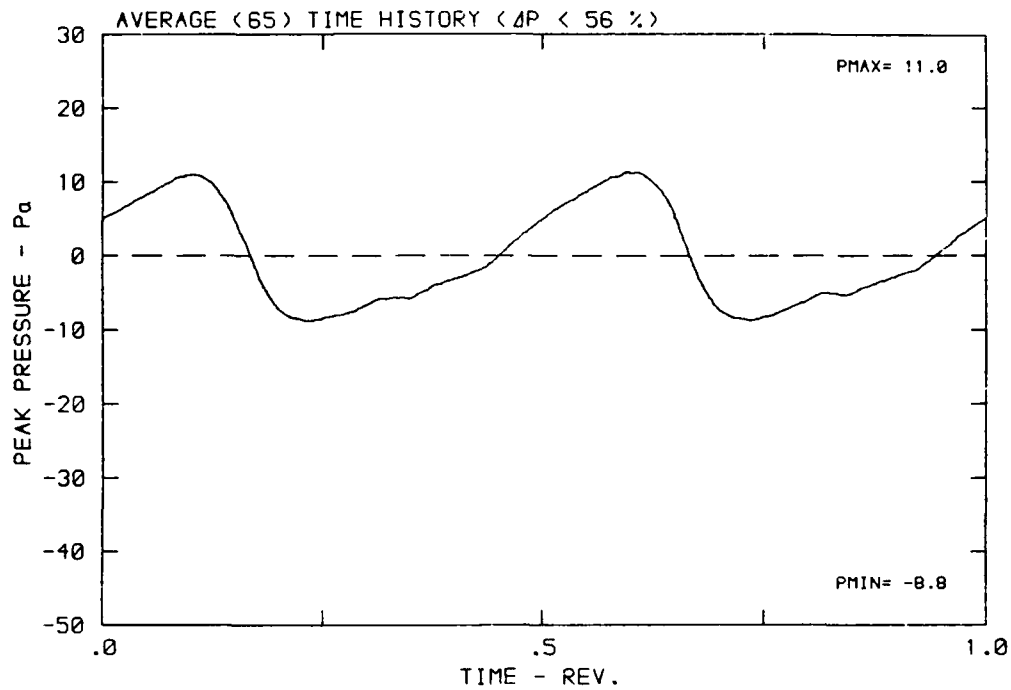
DATA POINT: GC-5 RUN: 146 MP: 7

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



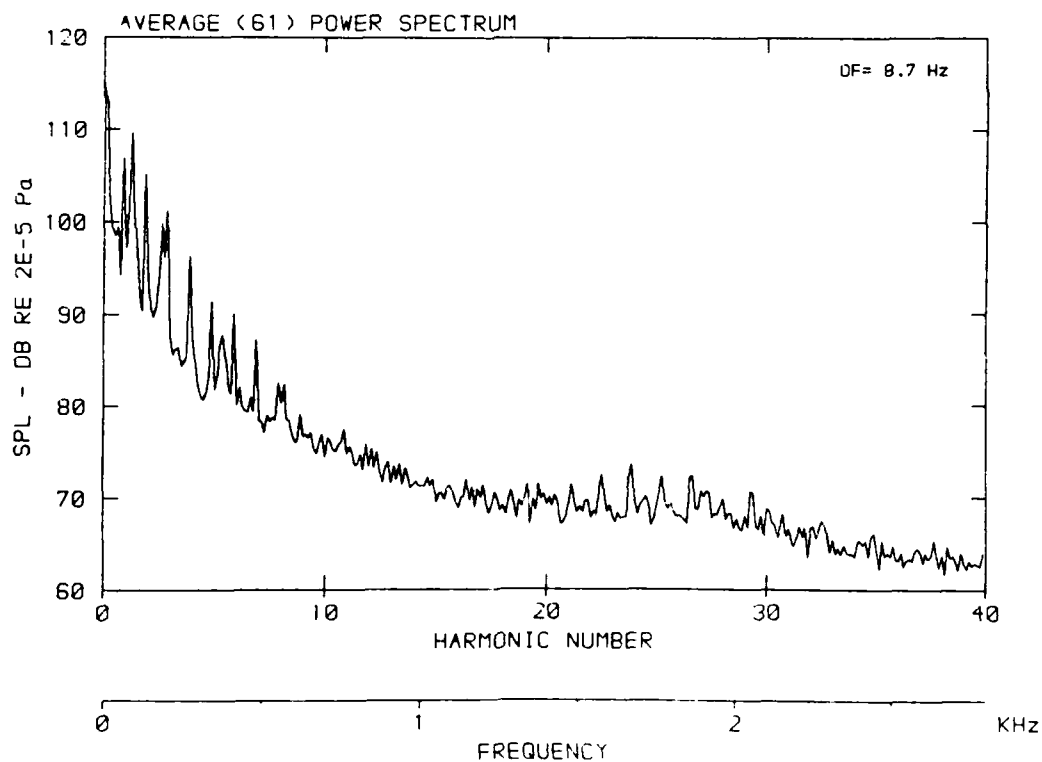
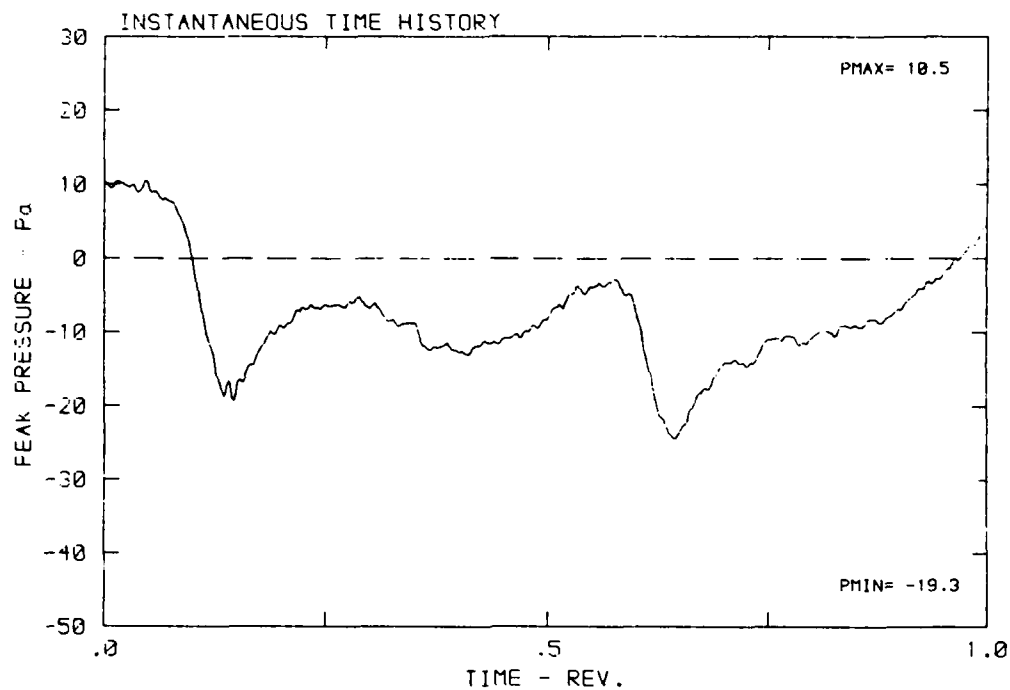
DATA POINT: GC-5 RUN: 146 MP: 7

β : 24.4° MH: .6750 n: 2100 rpm v/u : .231 ϕ : -7.4° T: 287.2 K



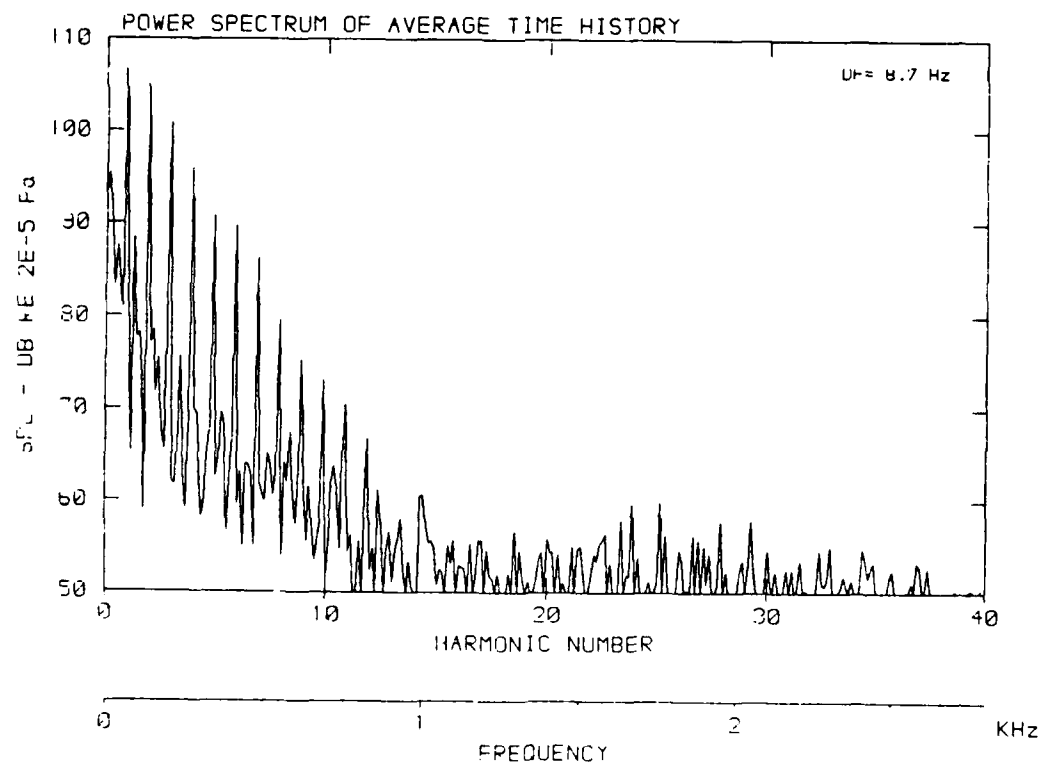
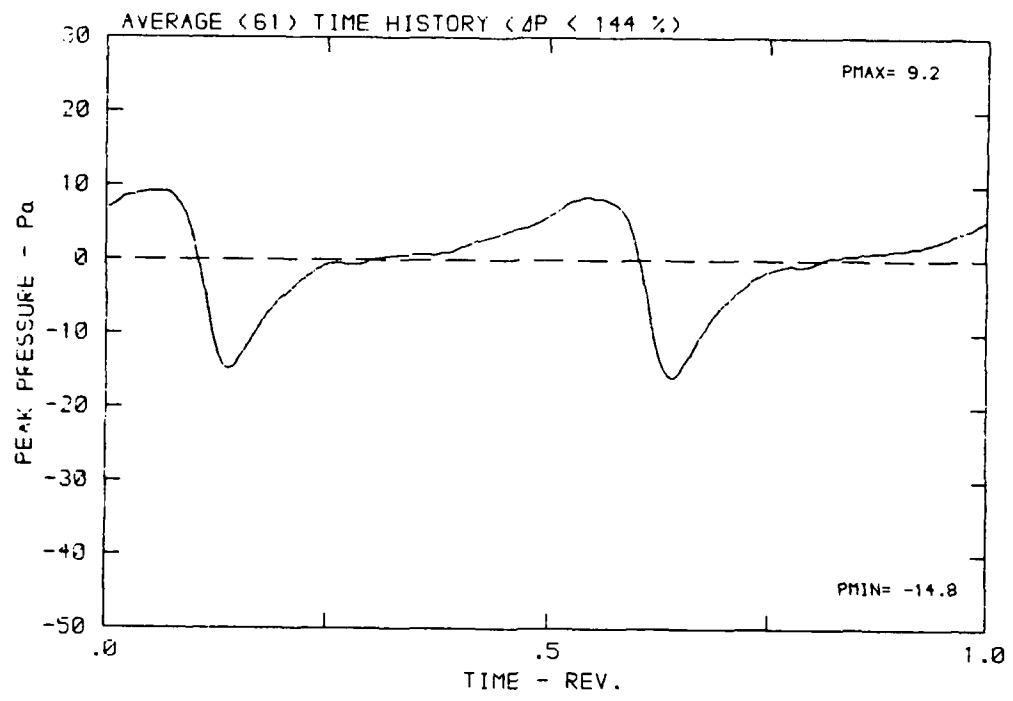
DATA POINT: GC-5 RUN: 146 MP: 8

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



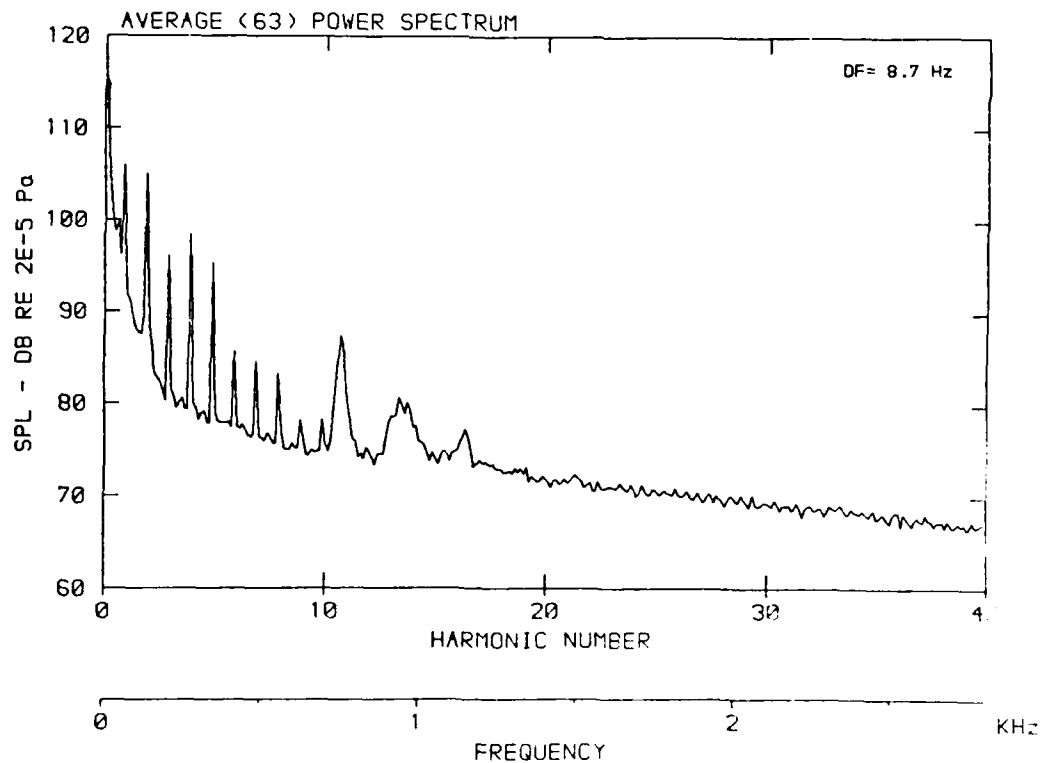
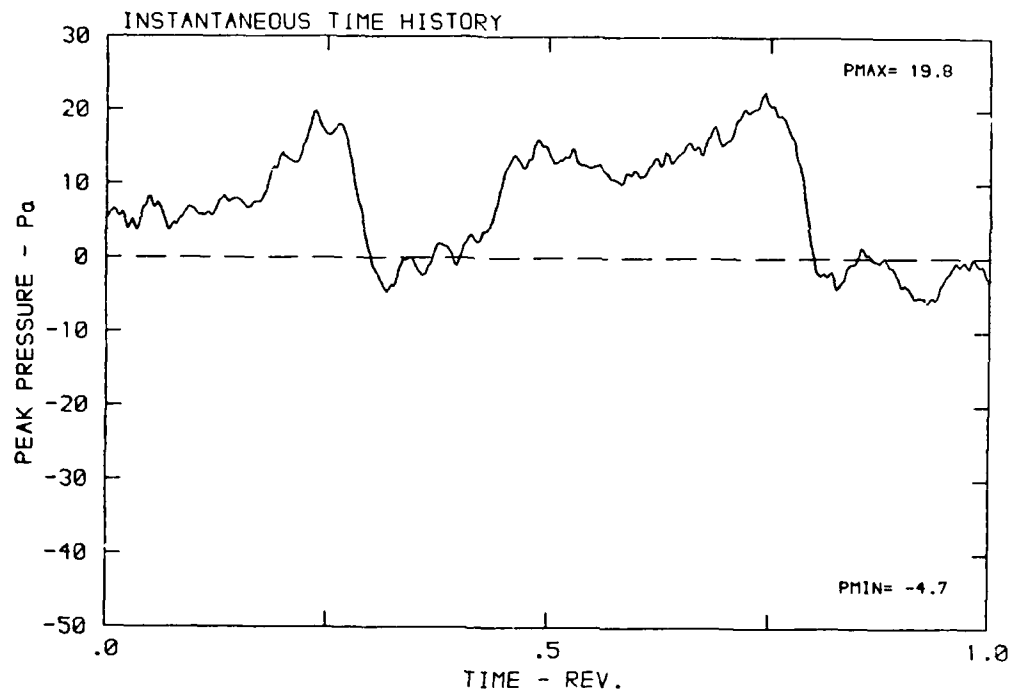
DATA POINT: GC-5 RUN: 146 MP: 8

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



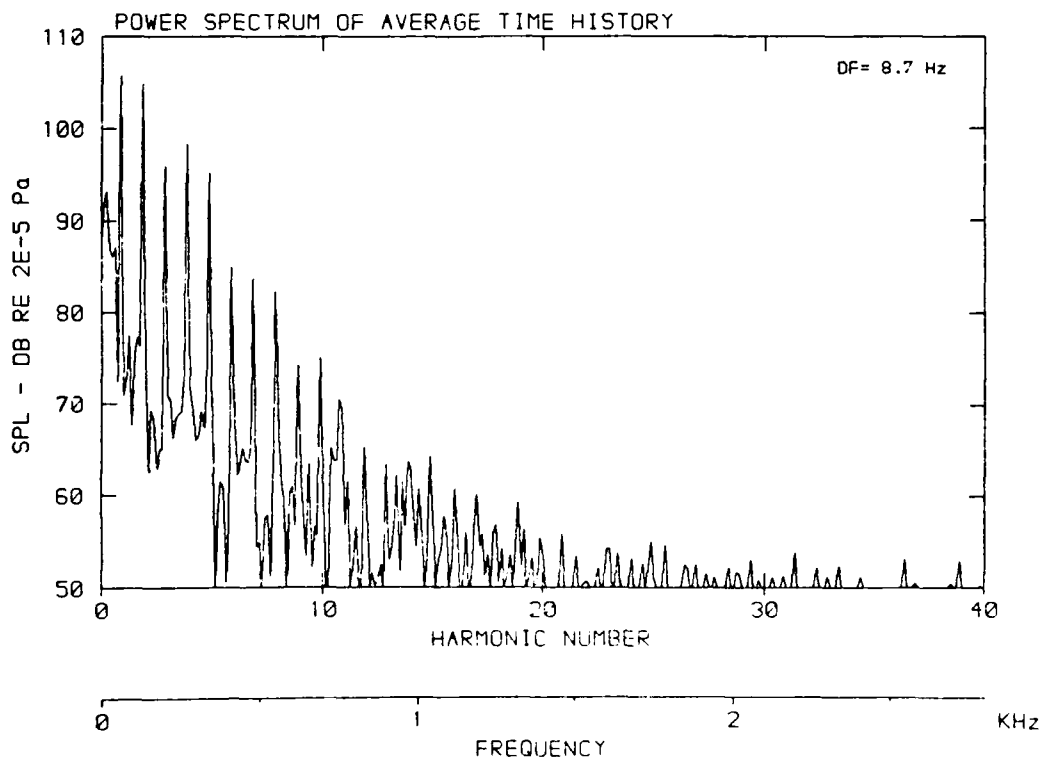
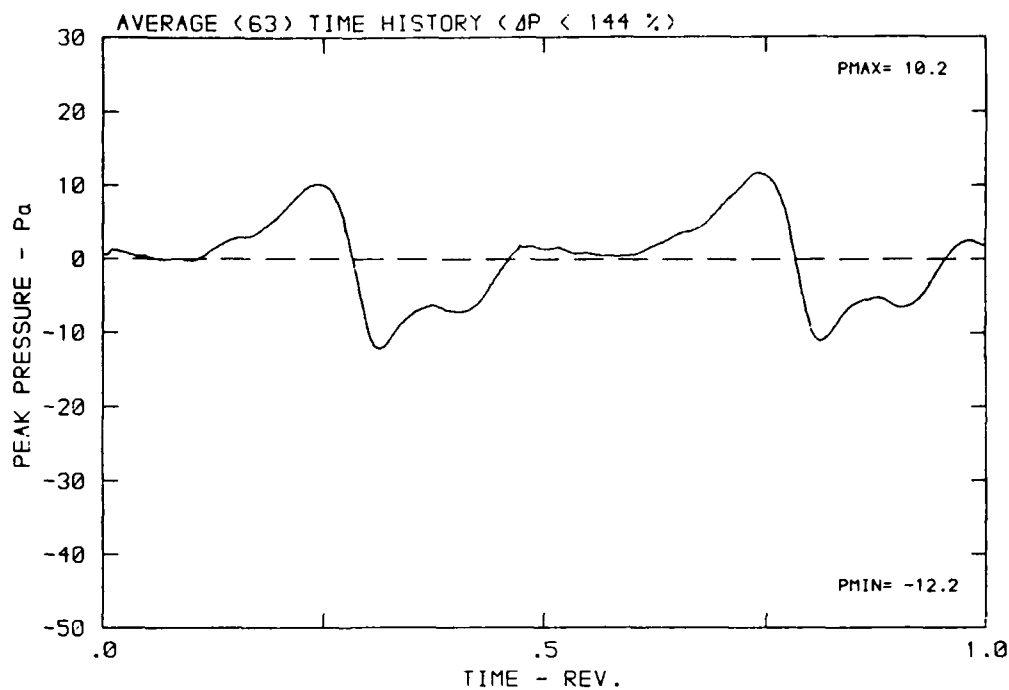
DATA POINT: GC-5 RUN: 146 MP: 9

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



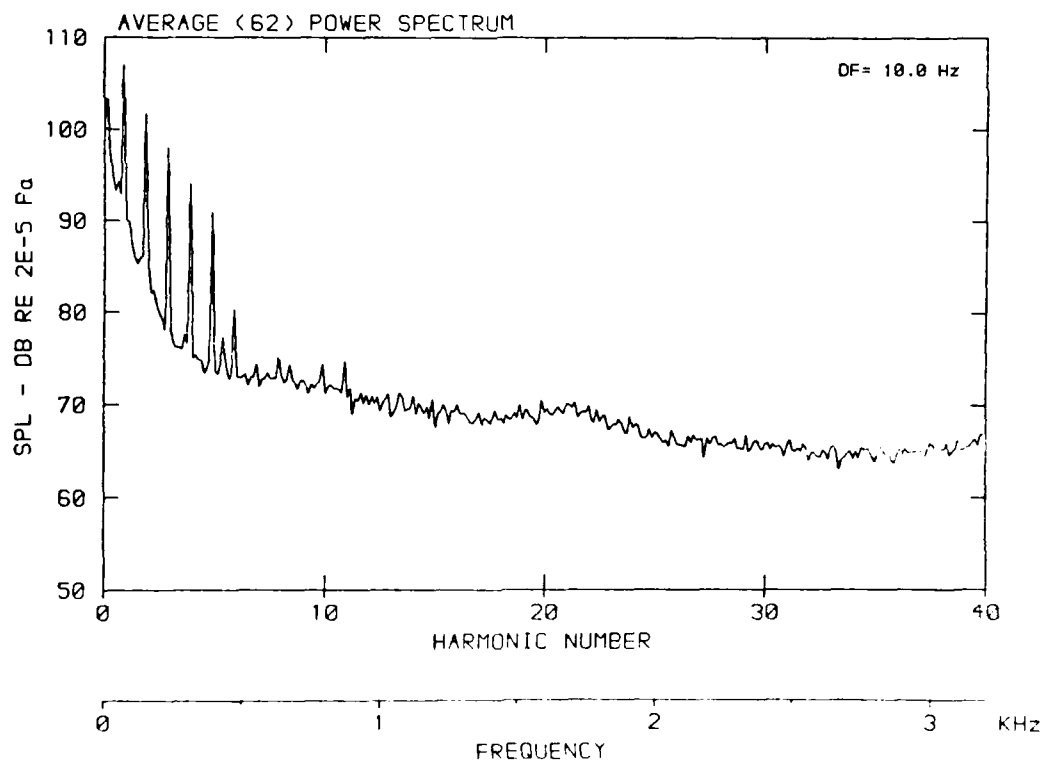
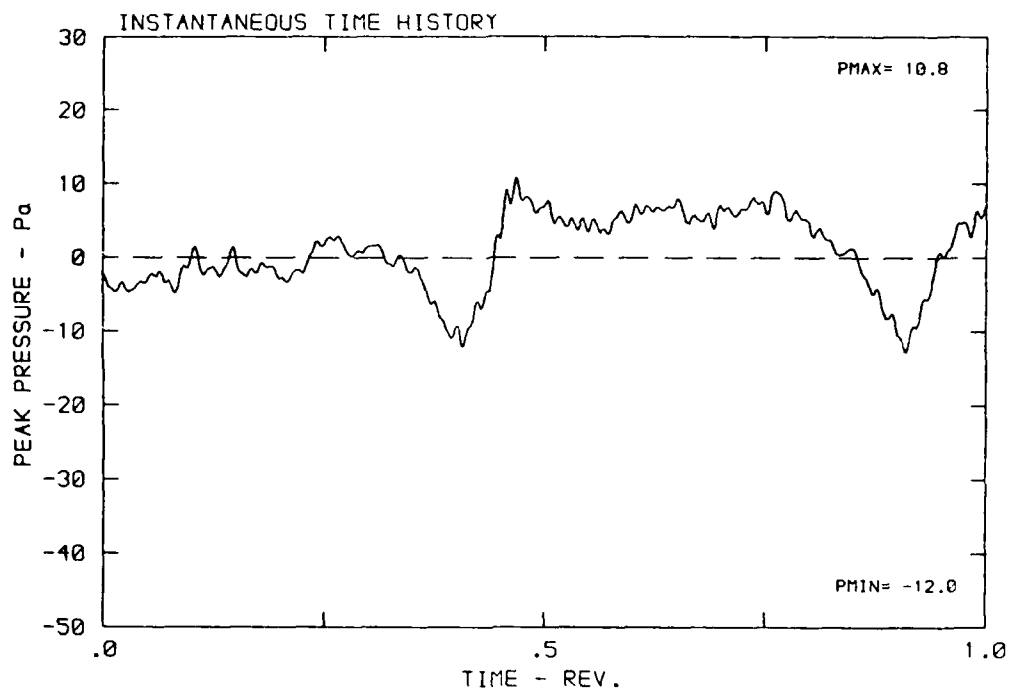
DATA POINT: GC-5 RUN: 146 MP: 9

β : 24.4° MH: .6750 n: 2100 rpm v/u: .231 ϕ : -7.4° T: 287.2 K



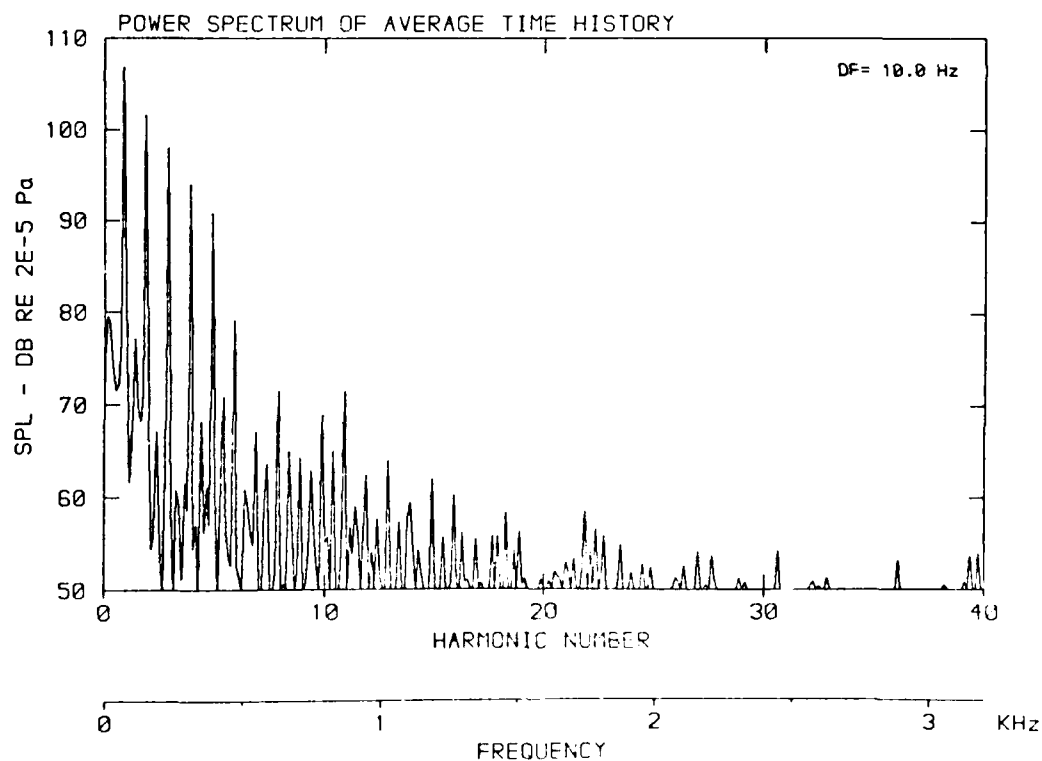
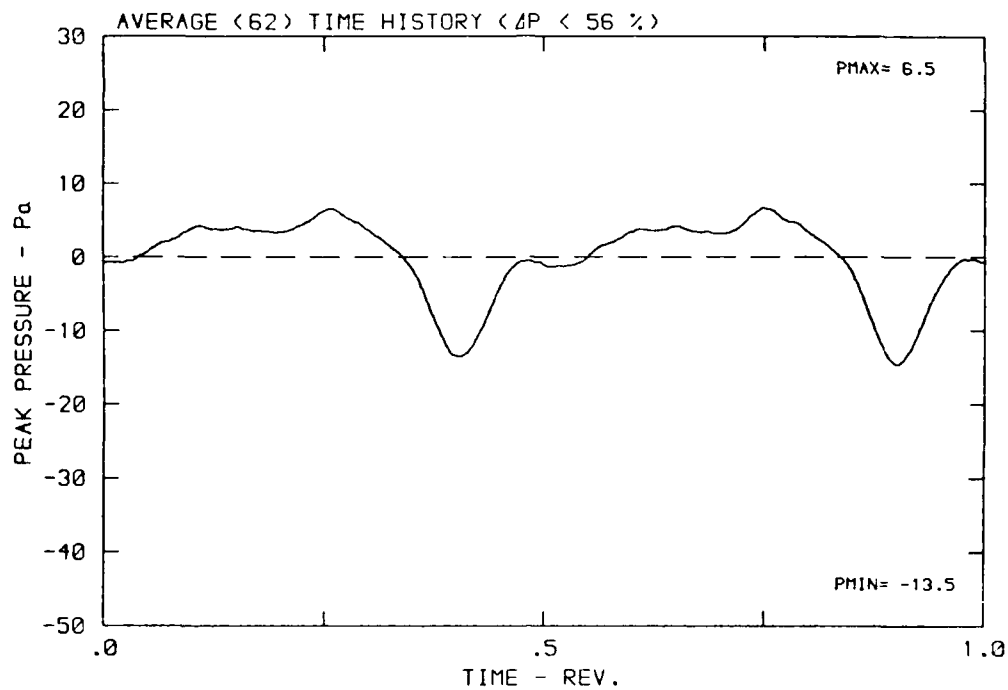
DATA POINT: GC-6 RUN: 147 MP: 1

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



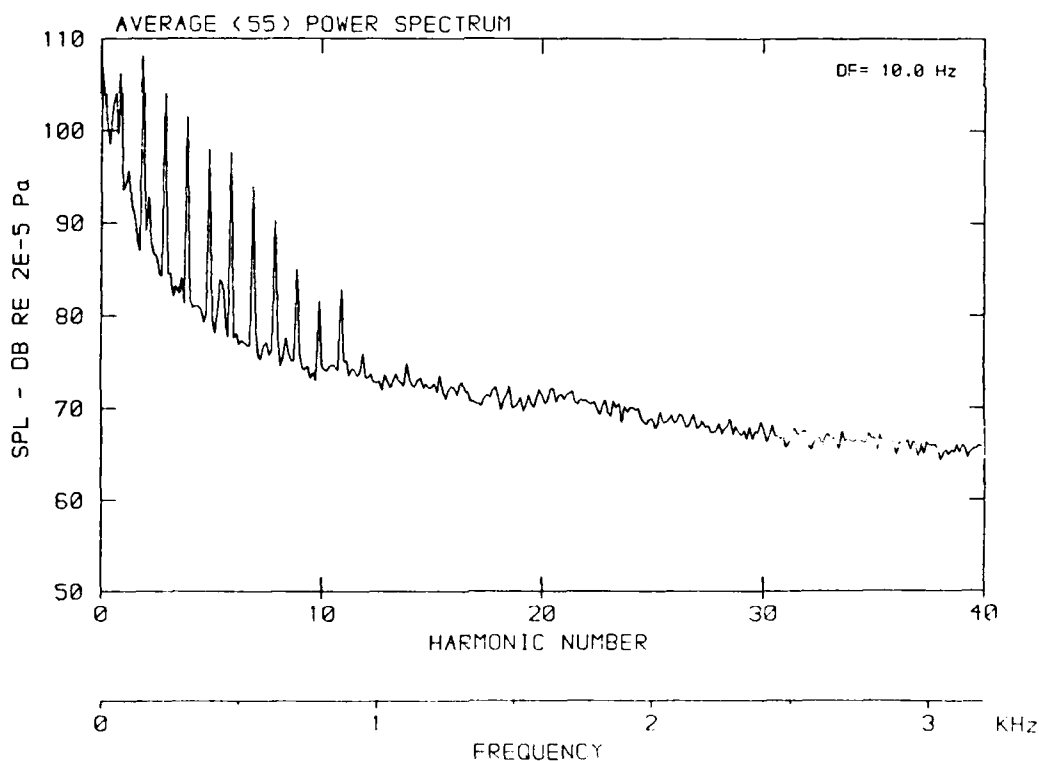
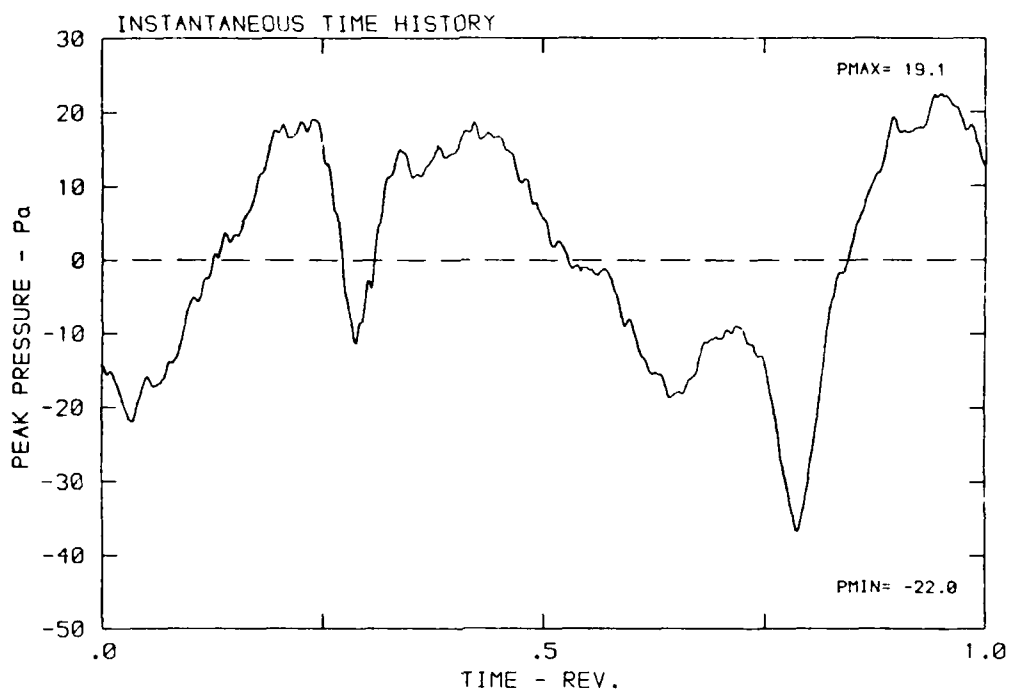
DATA POINT: GC-6 RUN: 147 MP: 1

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



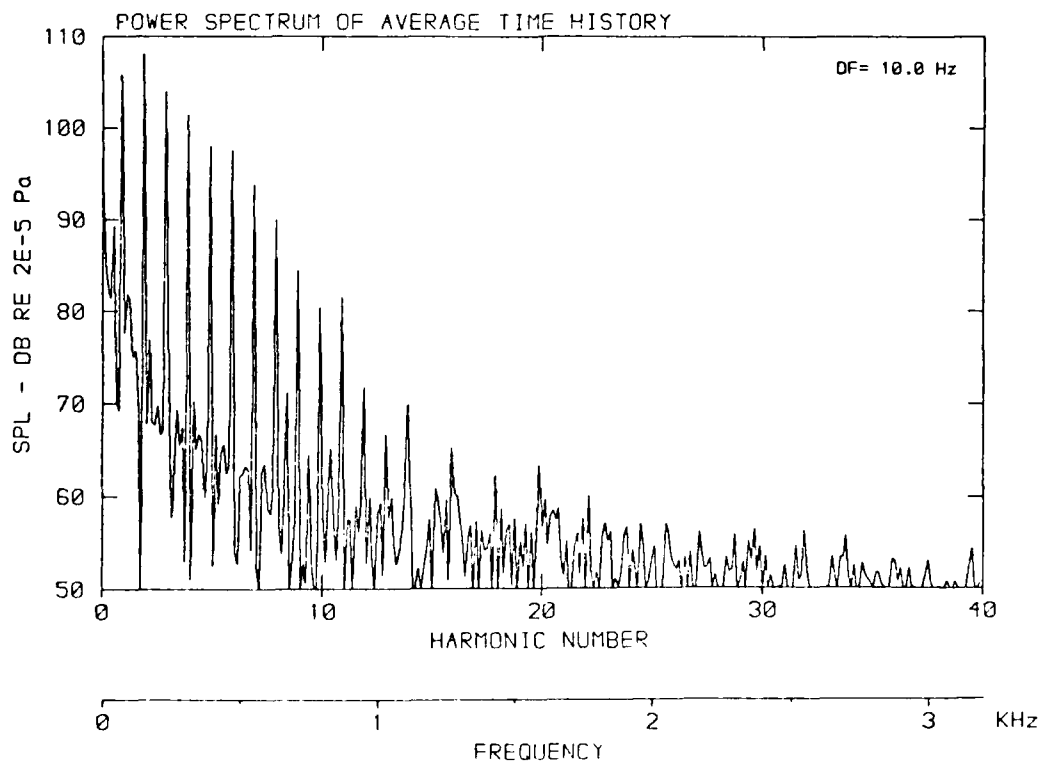
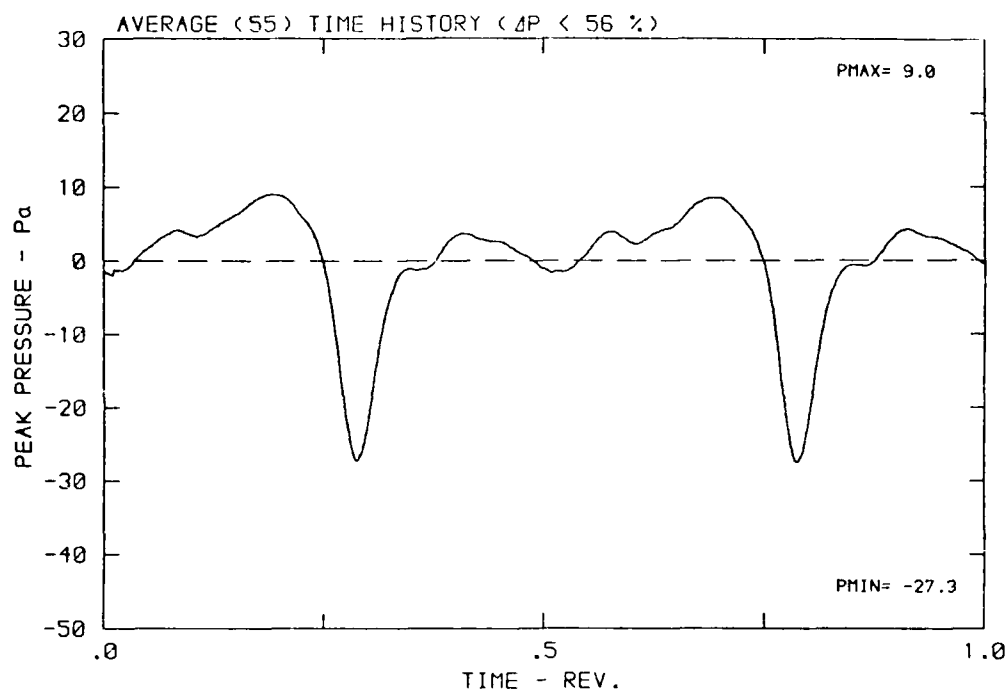
DATA POINT: GC-6 RUN: 147 MP: 2

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



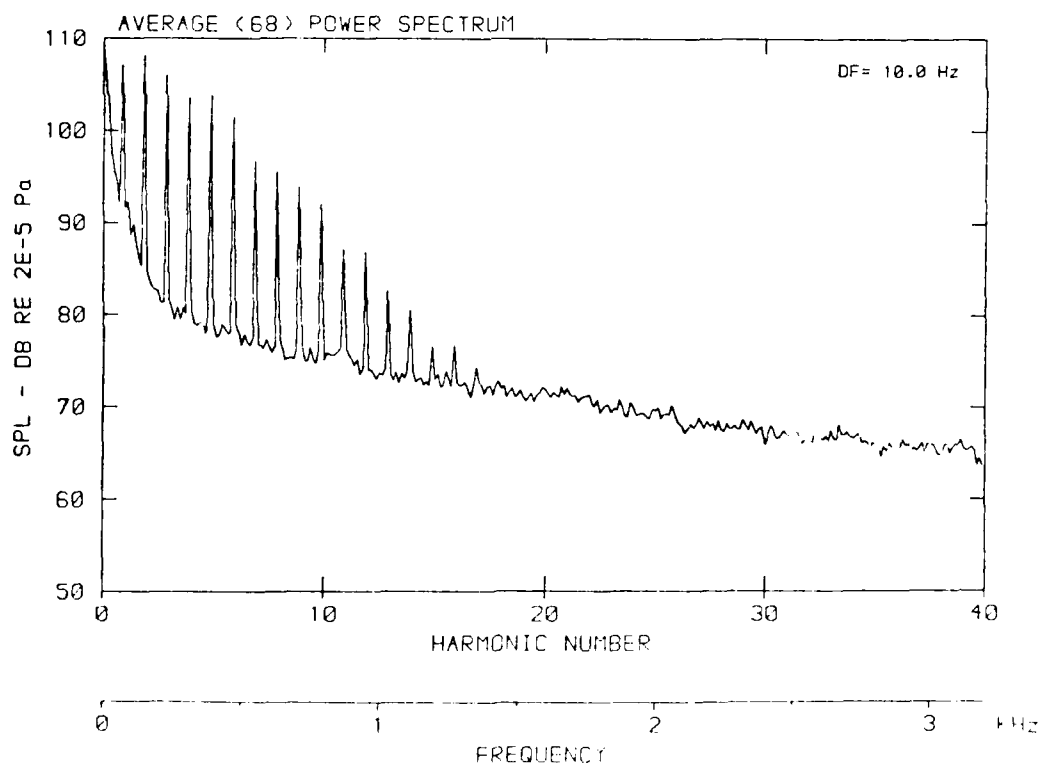
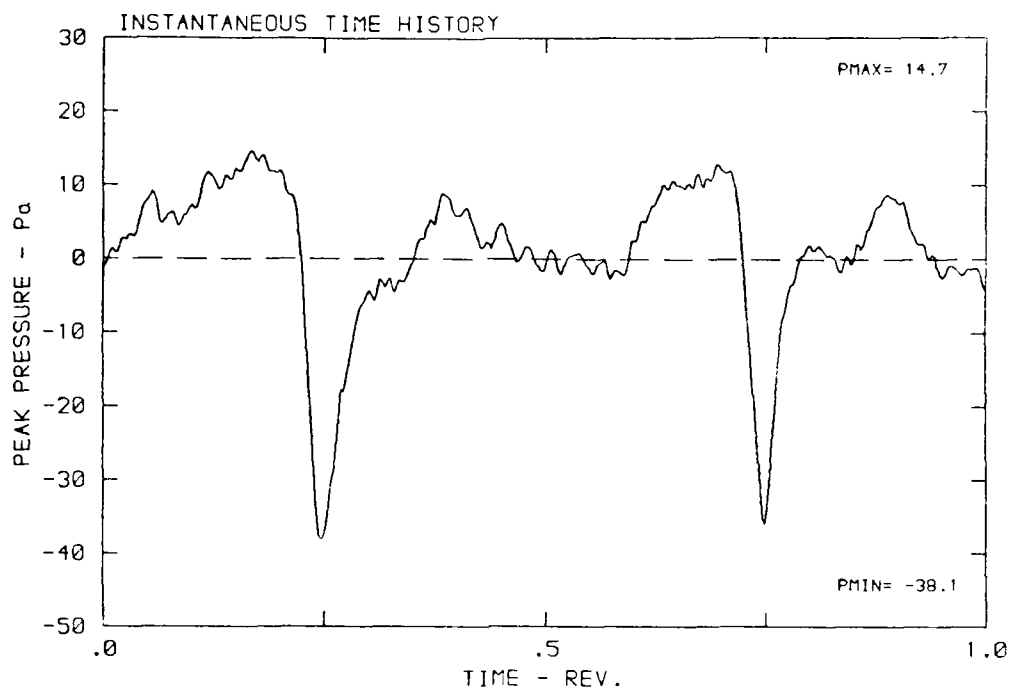
DATA POINT: GC-6 RUN: 147 MP: 2

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



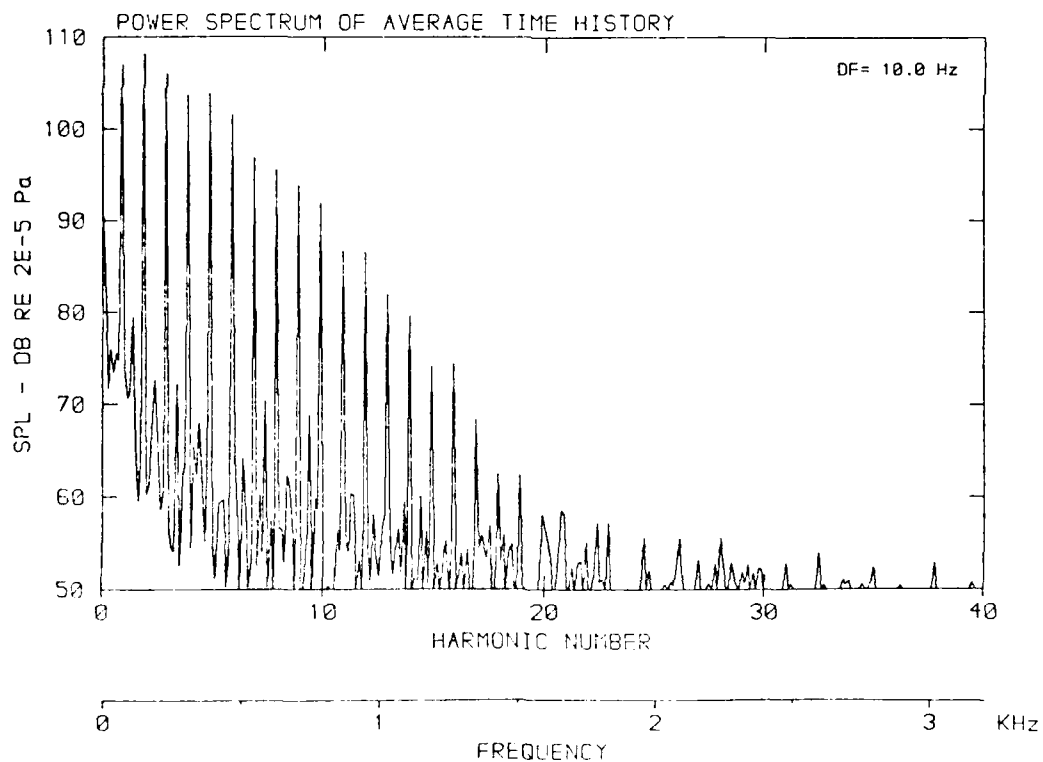
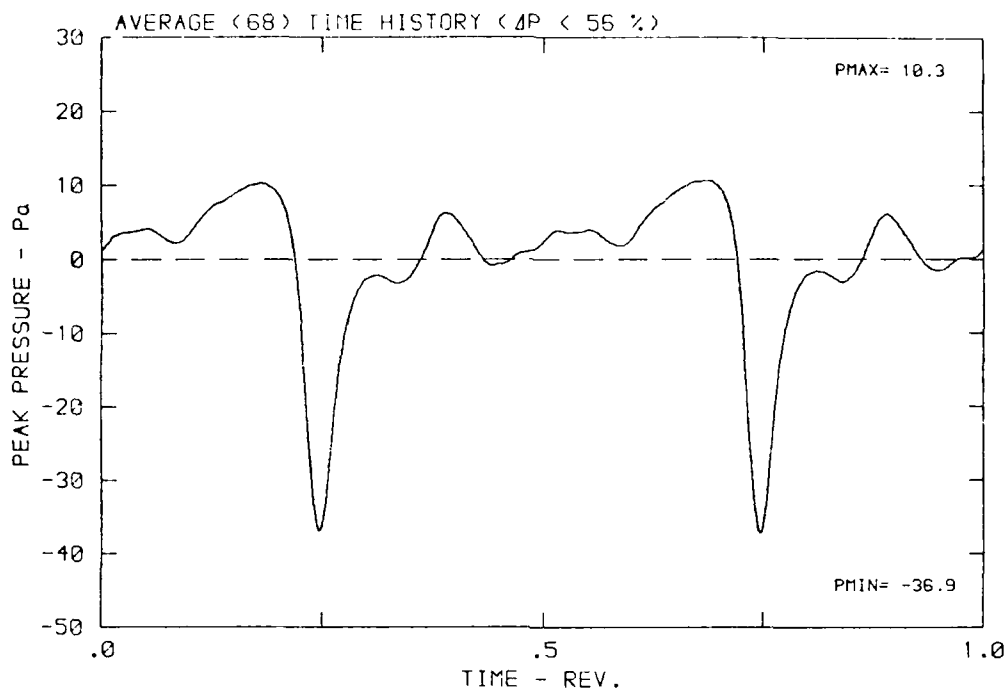
DATA POINT: GC-6 RUN: 147 MP: 3

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



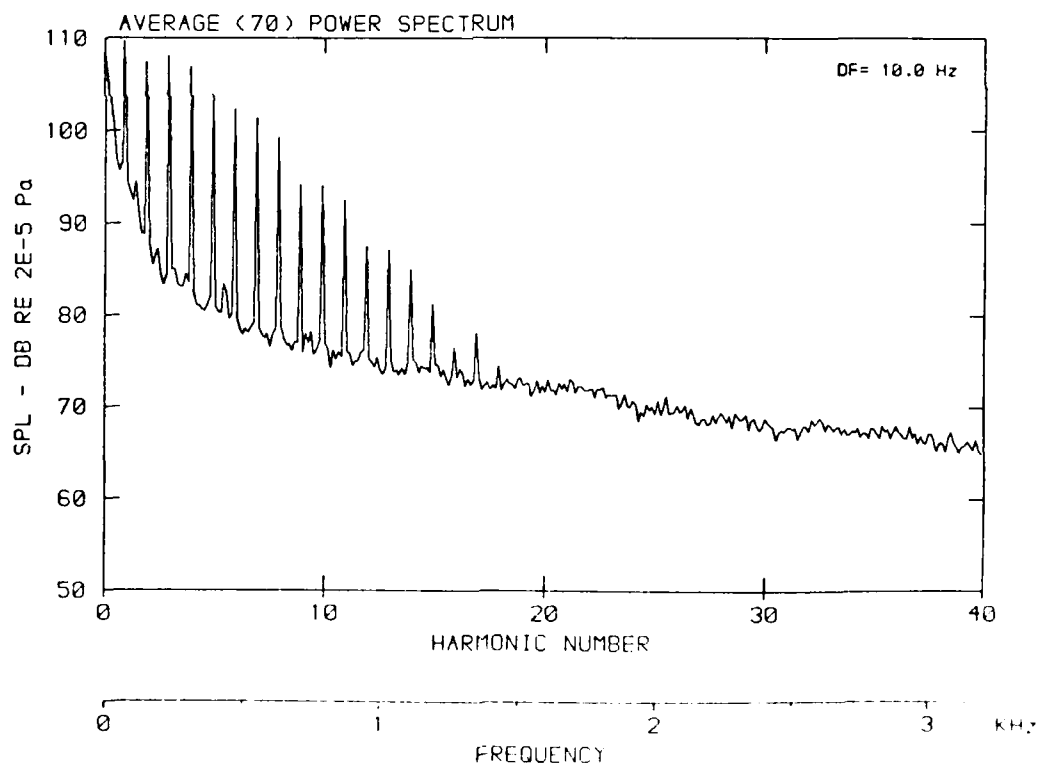
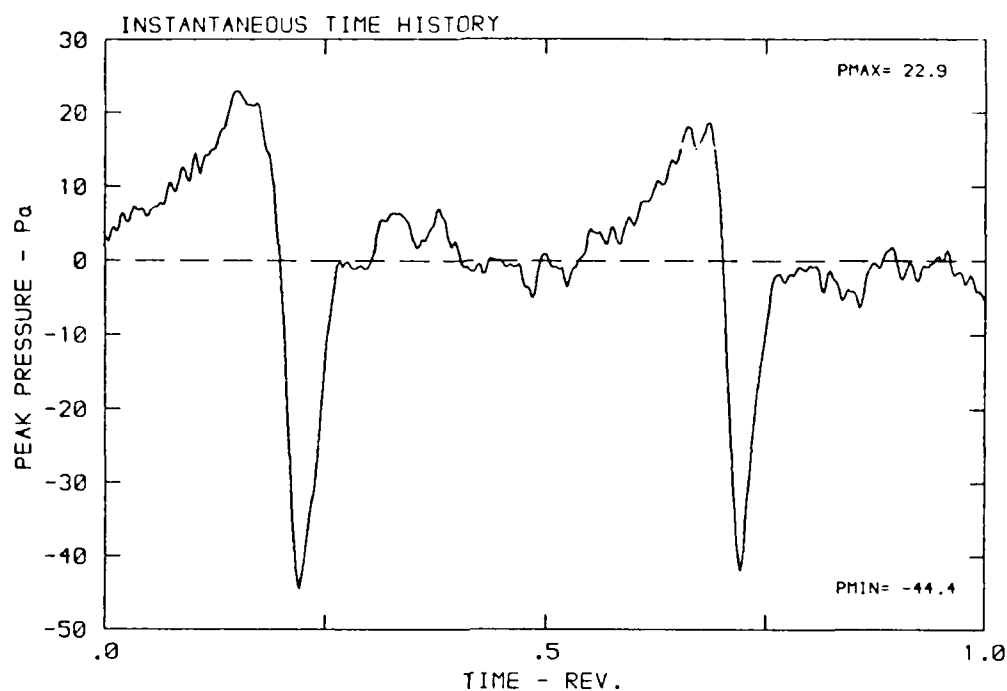
DATA POINT: GC-6 RUN: 147 MP: 3

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



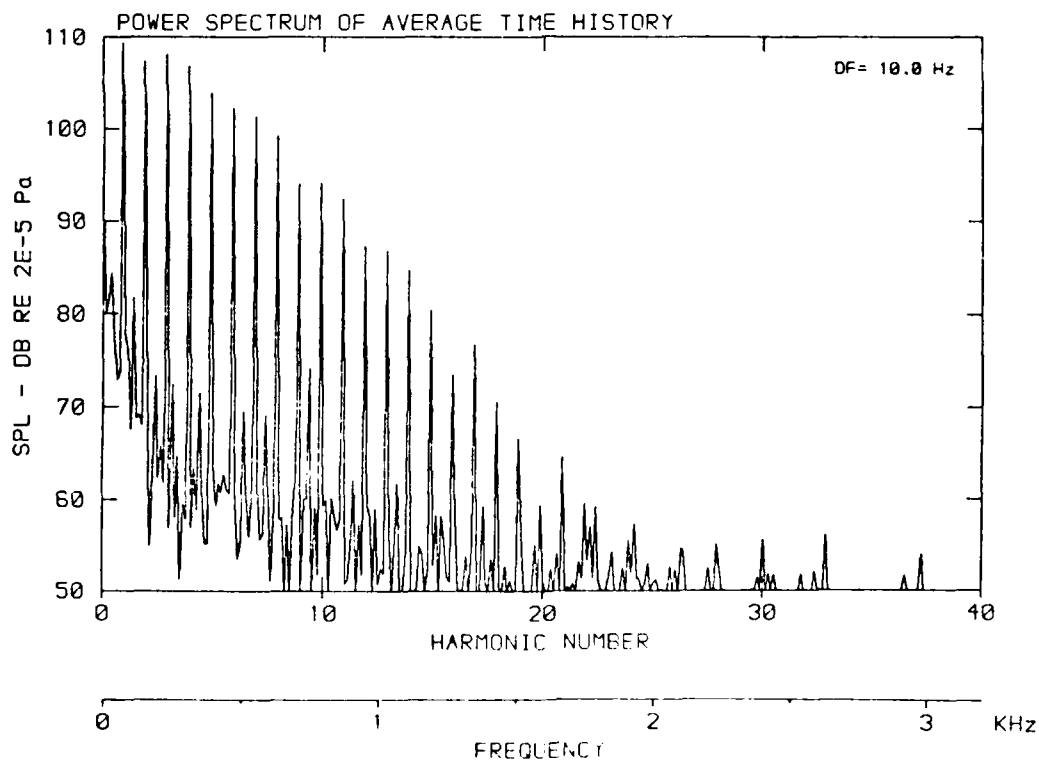
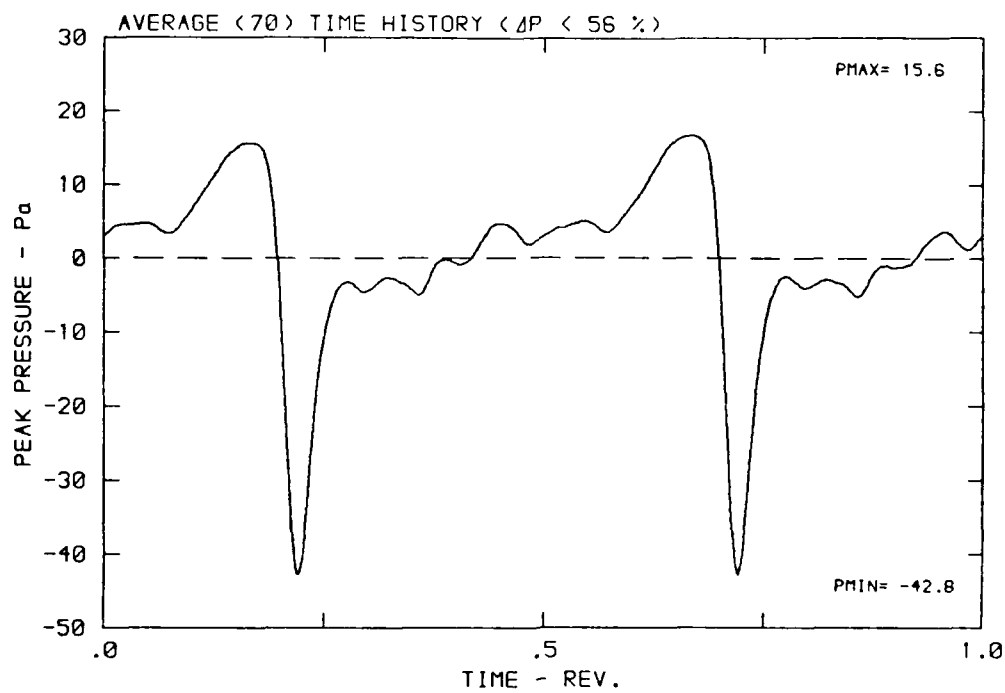
DATA POINT: GC-6 RUN: 147 MP: 4

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 298.1 K



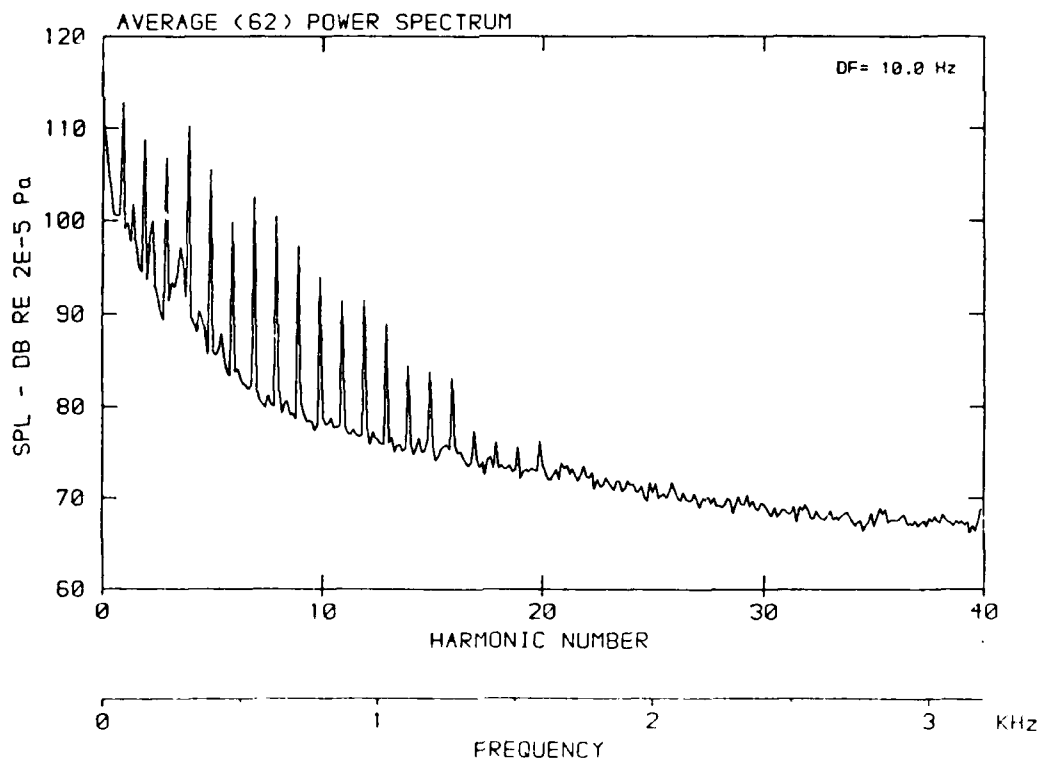
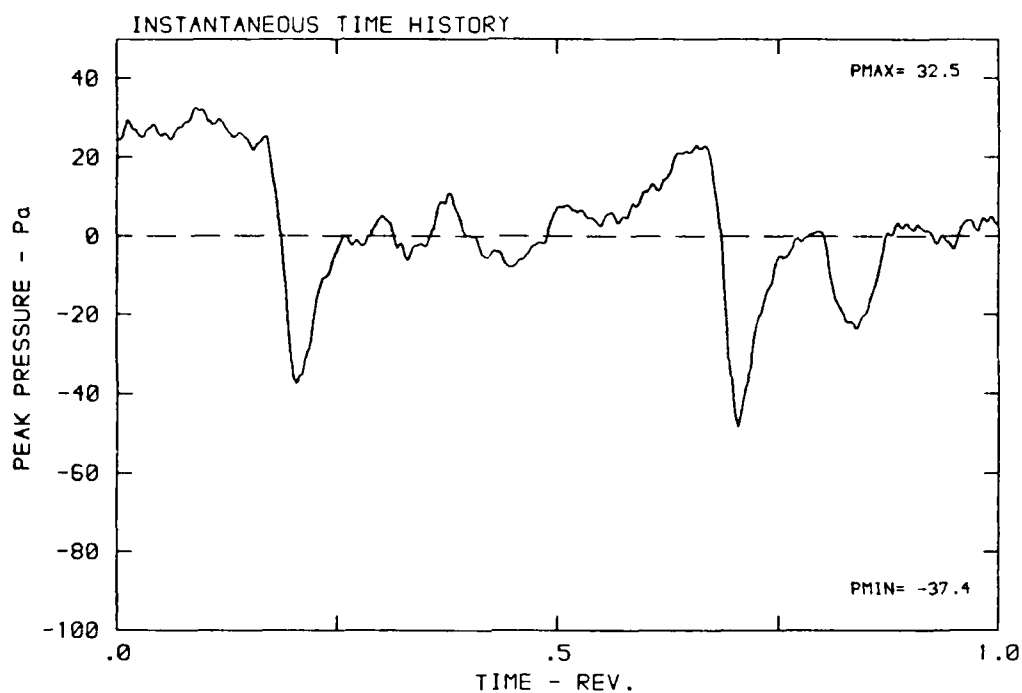
DATA POINT: GC-6 RUN: 147 MP: 4

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



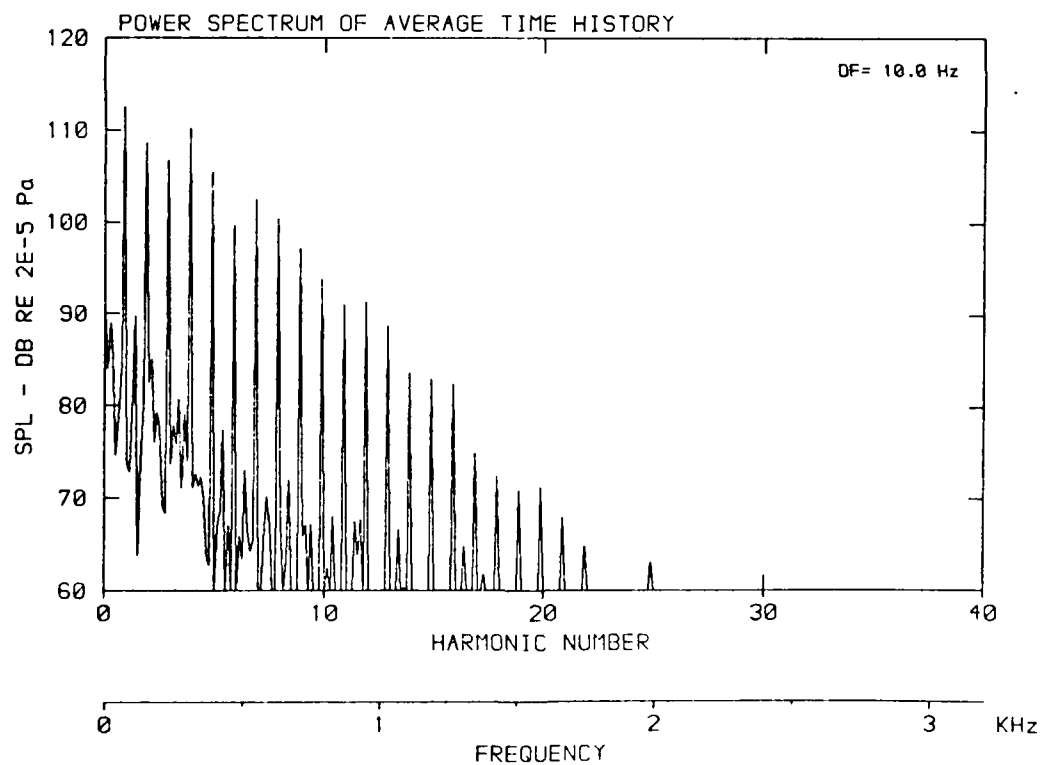
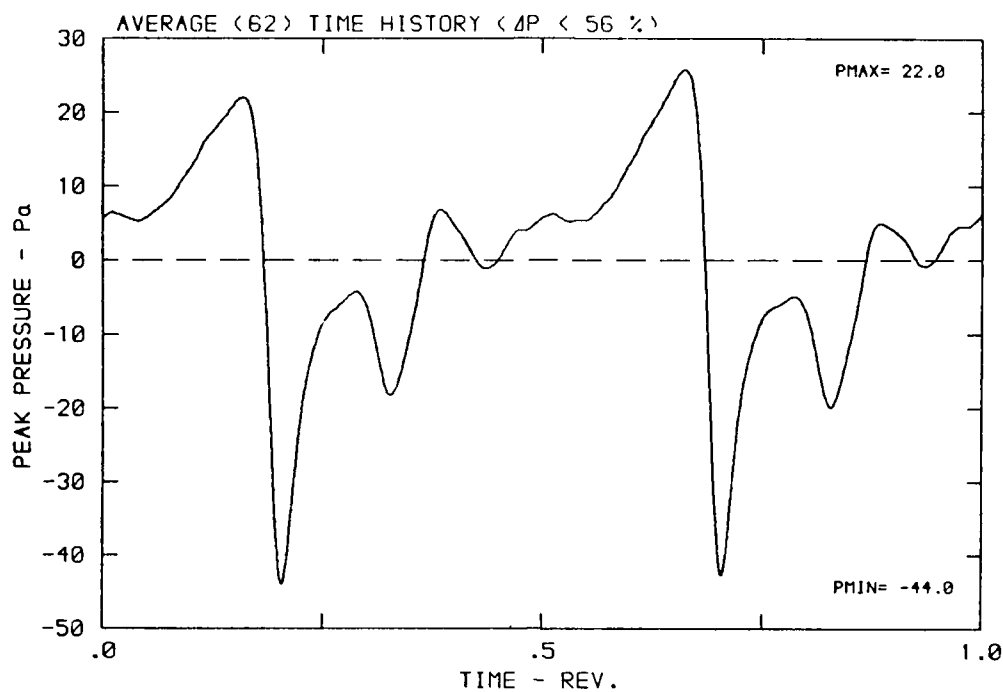
DATA POINT: GC-6 RUN: 147 MP: 5

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



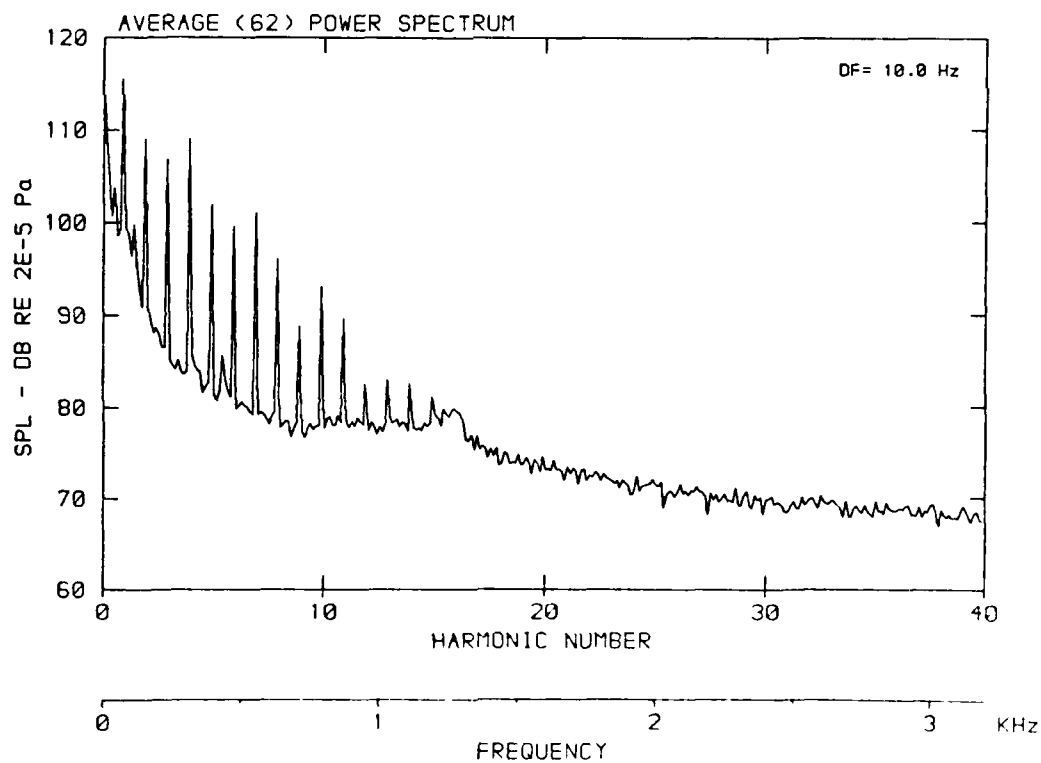
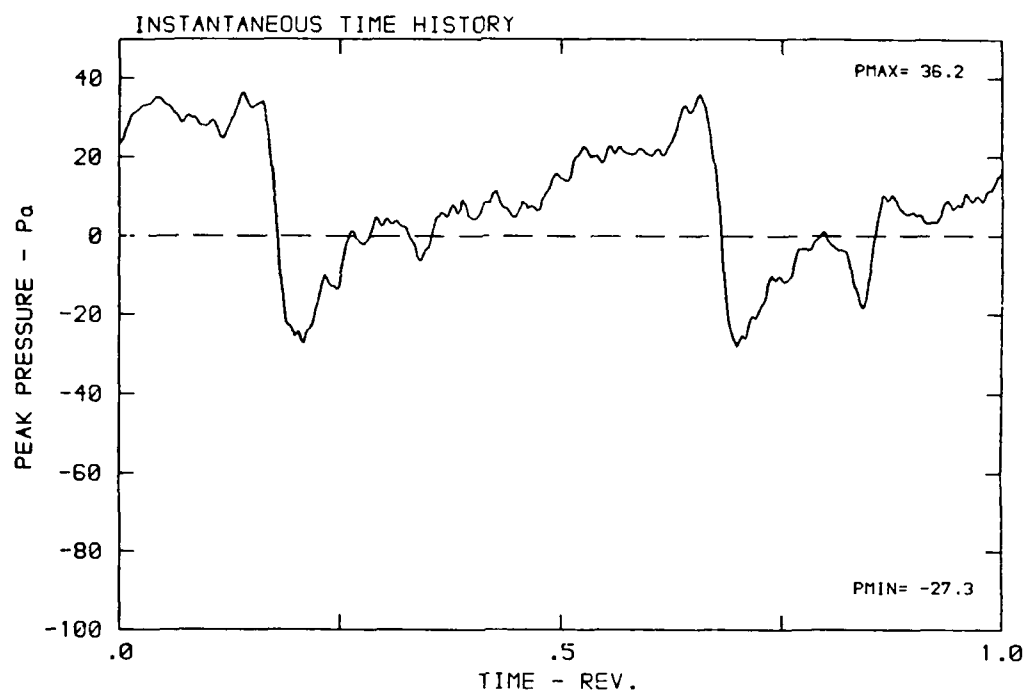
DATA POINT: GC-6 RUN: 147 MP: 5

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



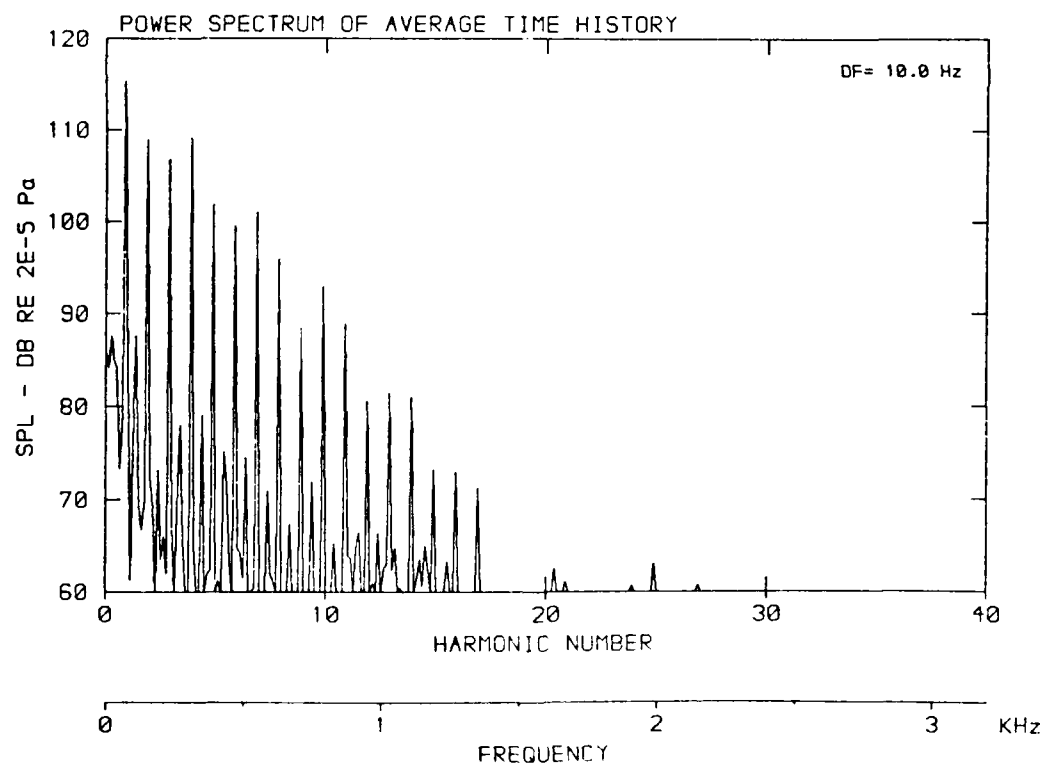
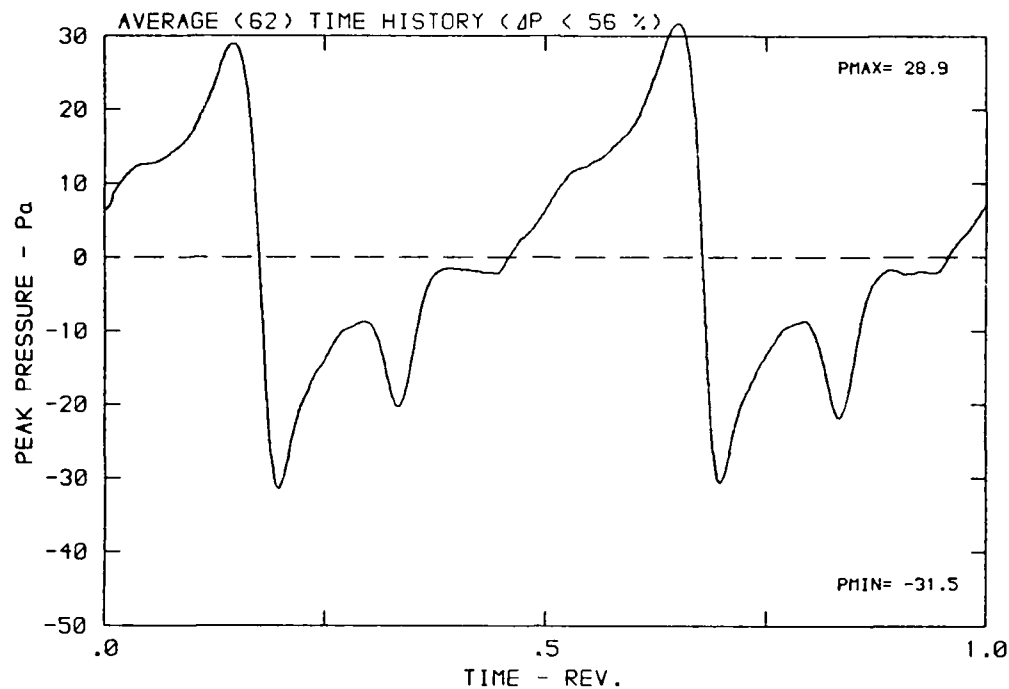
DATA POINT: GC-6 RUN: 147 MP: 6

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



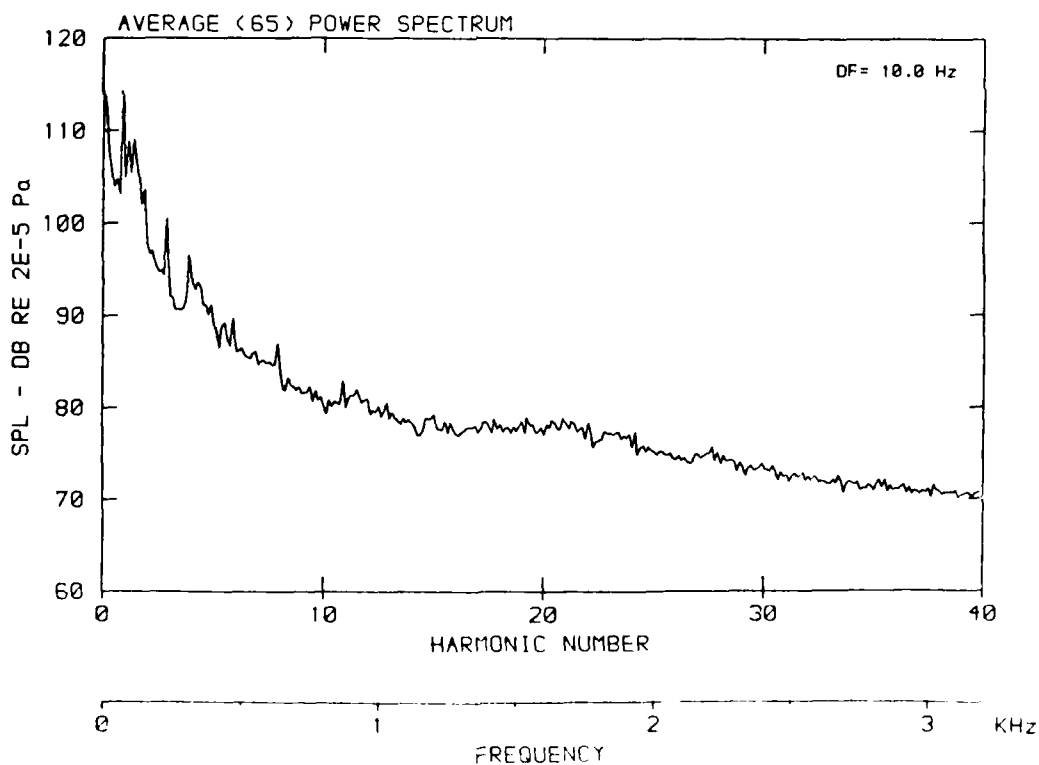
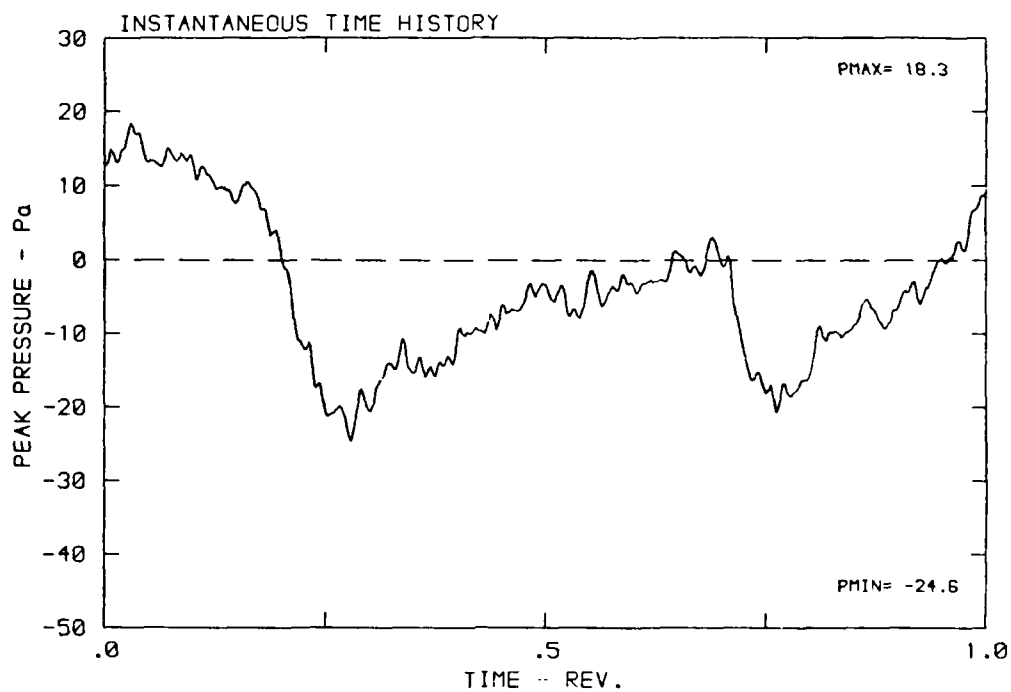
DATA POINT: GC-6 RUN: 147 MP: 6

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



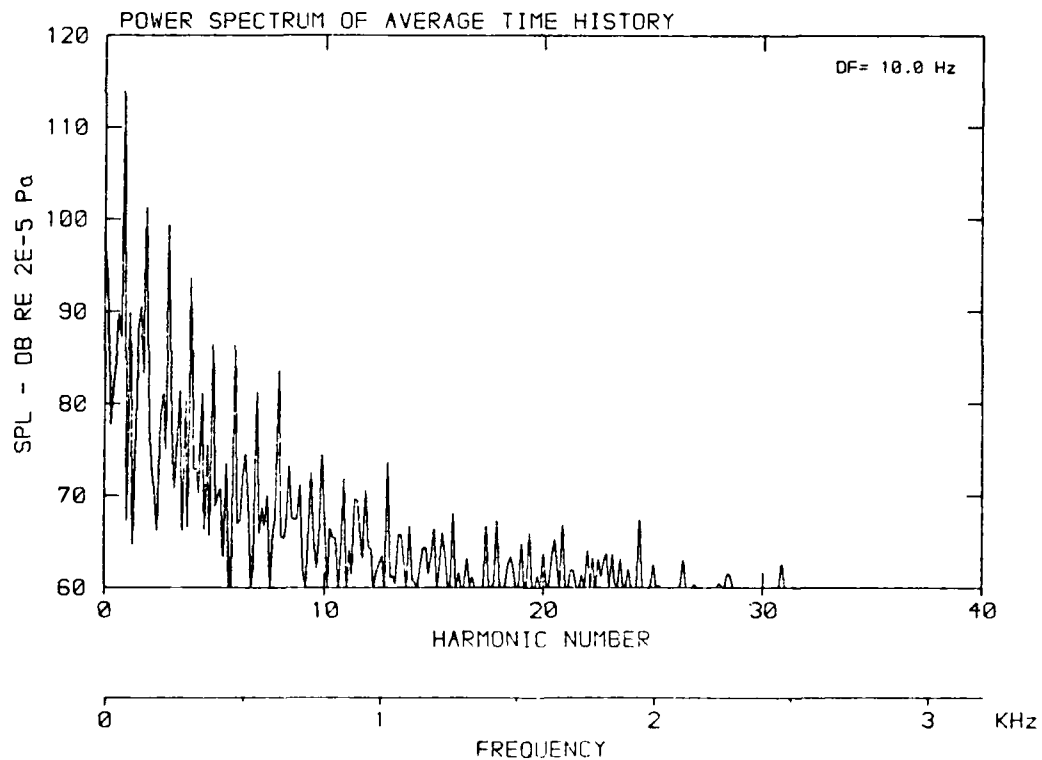
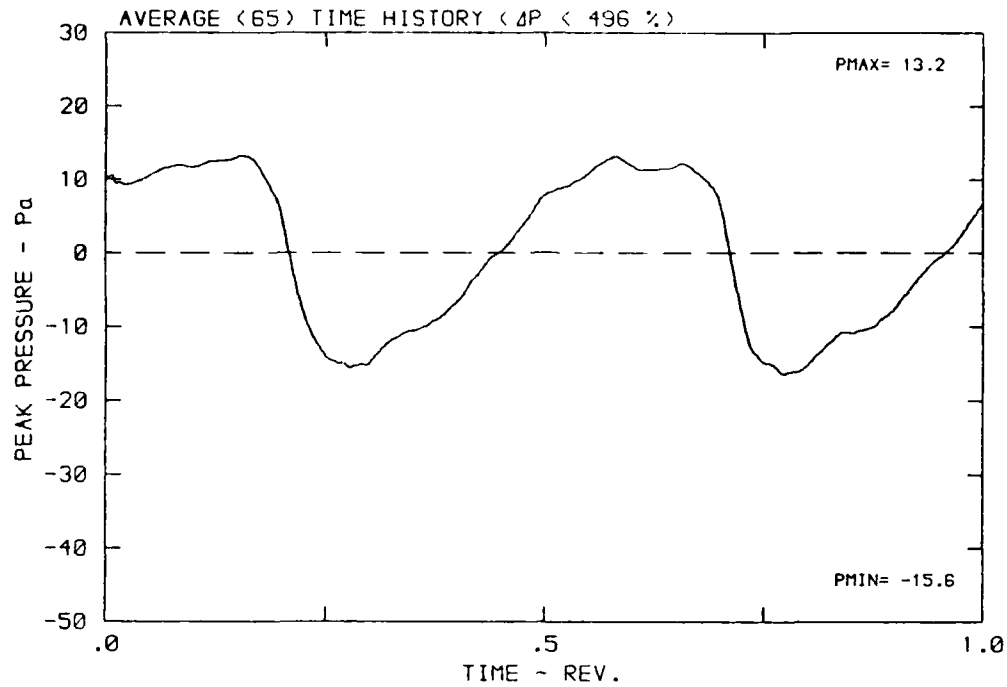
DATA POINT: GC-6 RUN: 147 MP: 7

β : 24.4° MH: .7758 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.1 K



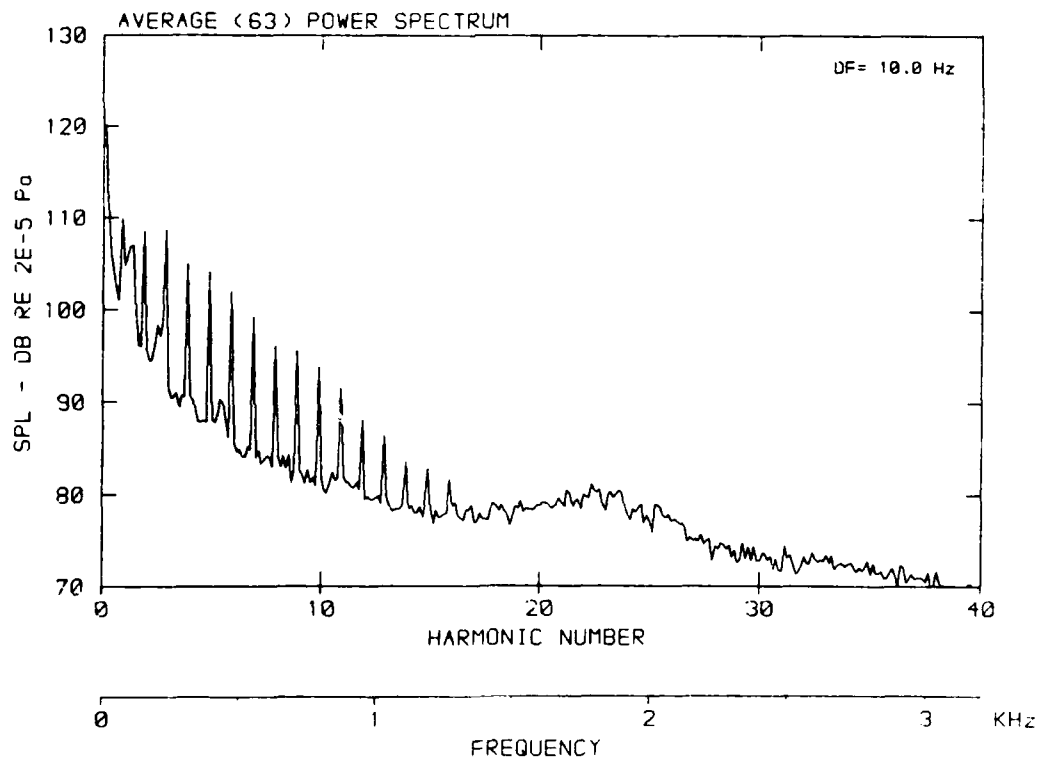
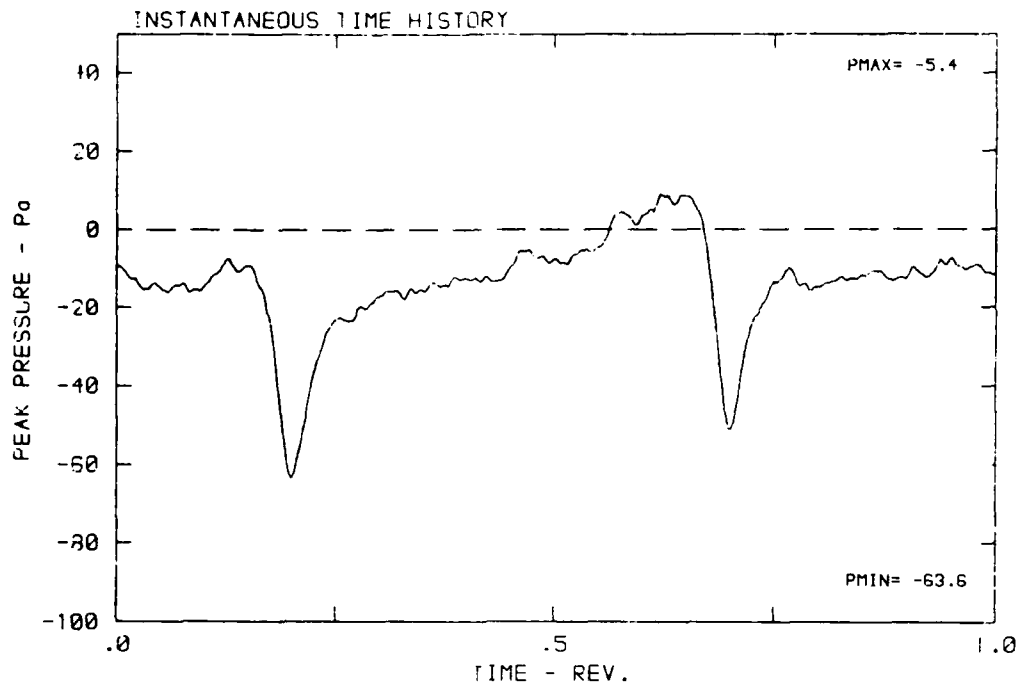
DATA POINT: GC-6 RUN: 147 MP: 7

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



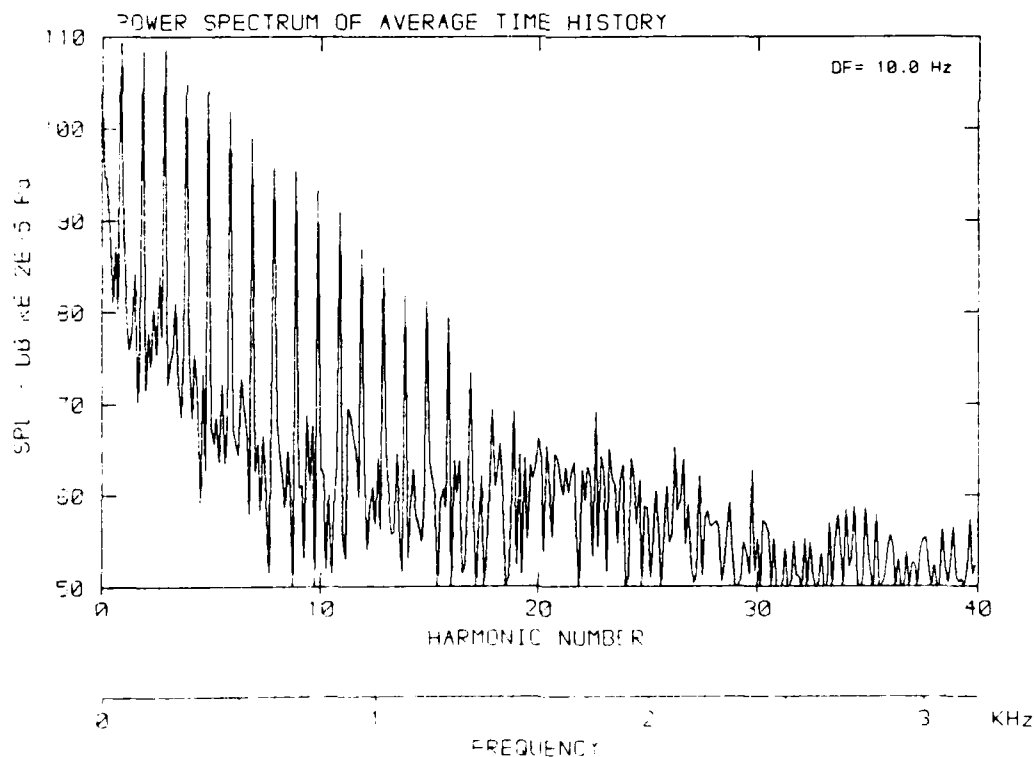
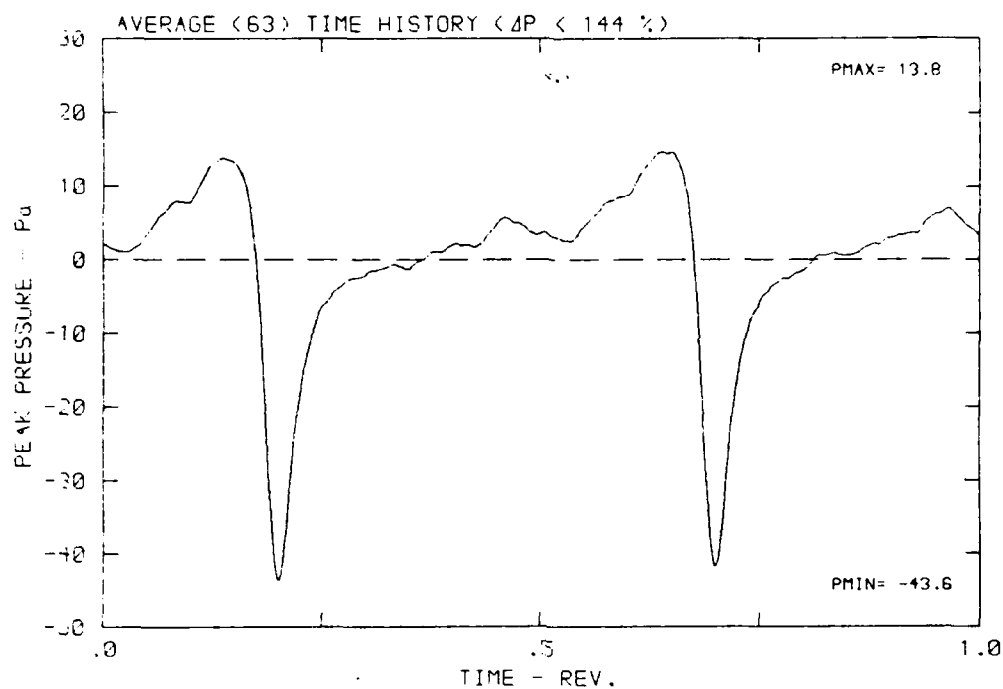
DATA POINT: GC-6 RUN: 147 MP: 8

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



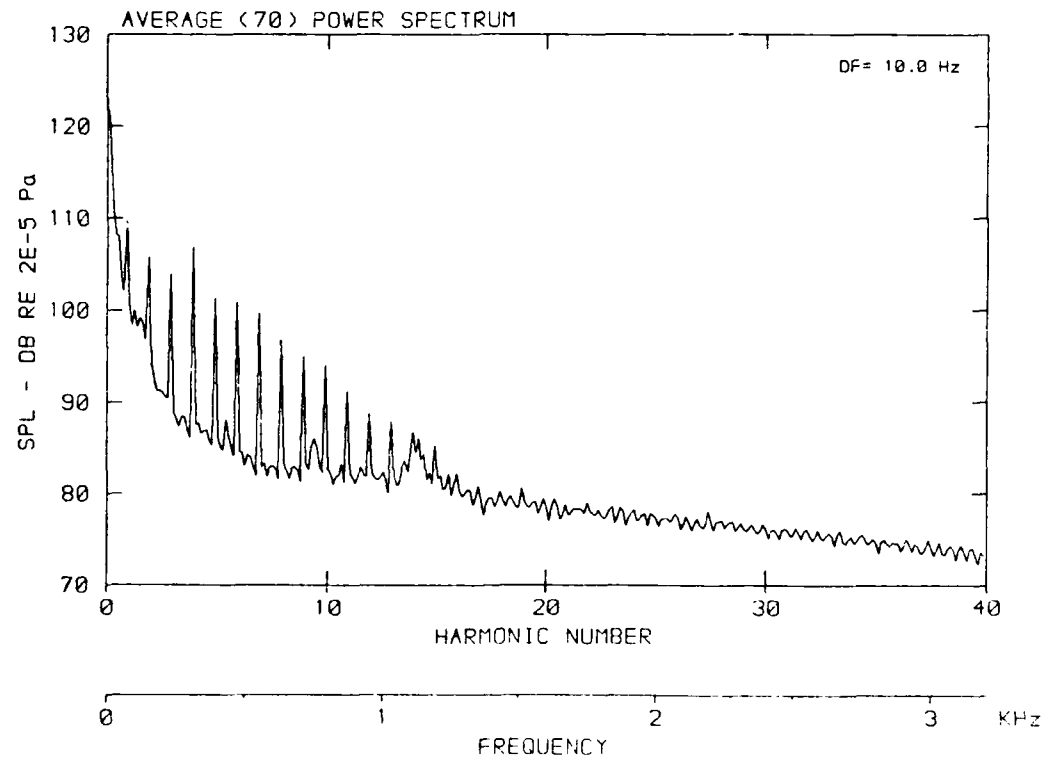
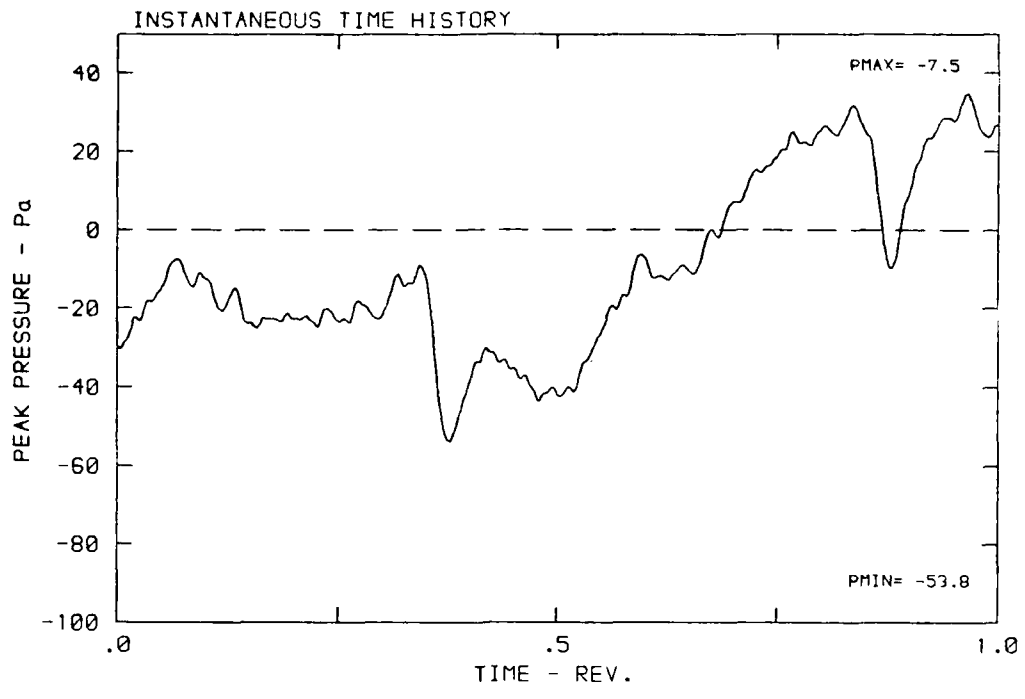
DATA POINT: GC-6 RUN: 147 MP: 8

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



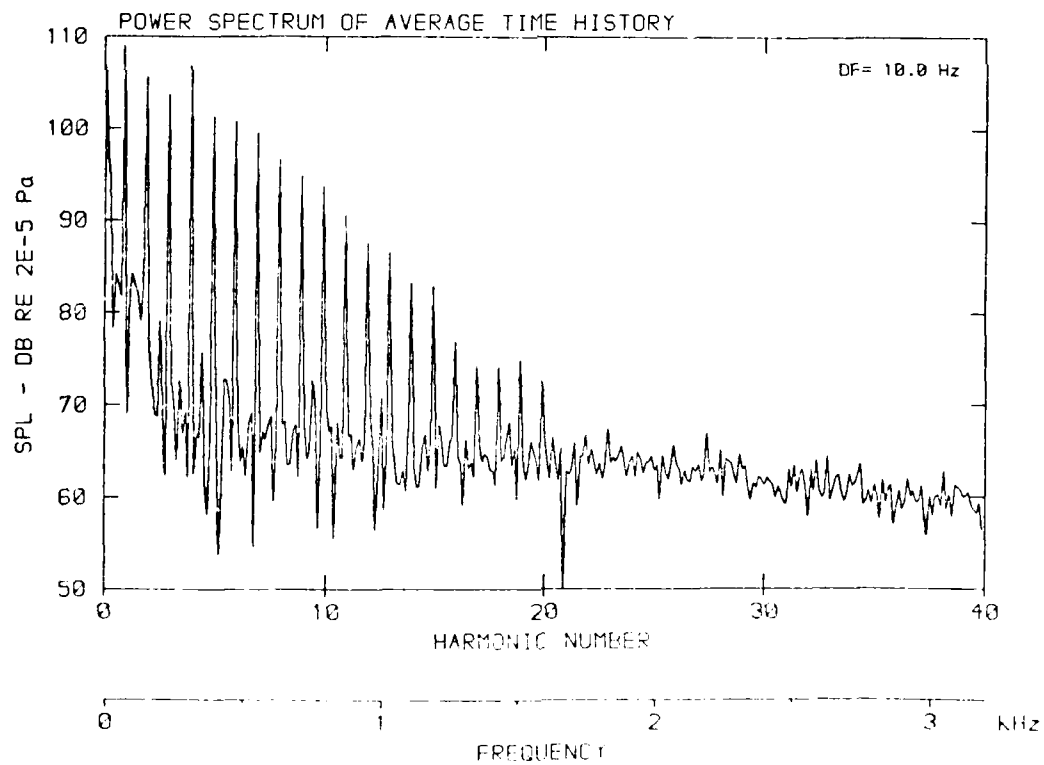
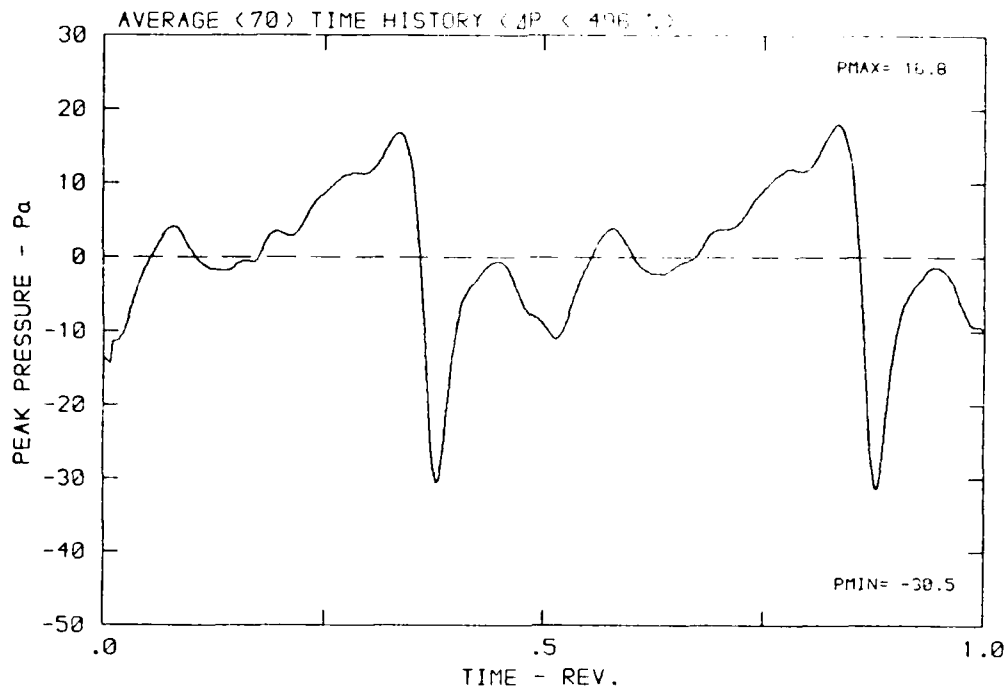
DATA POINT: GC-6 RUN: 147 MP: 9

β : 24.4° MH: .7758 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.1 K



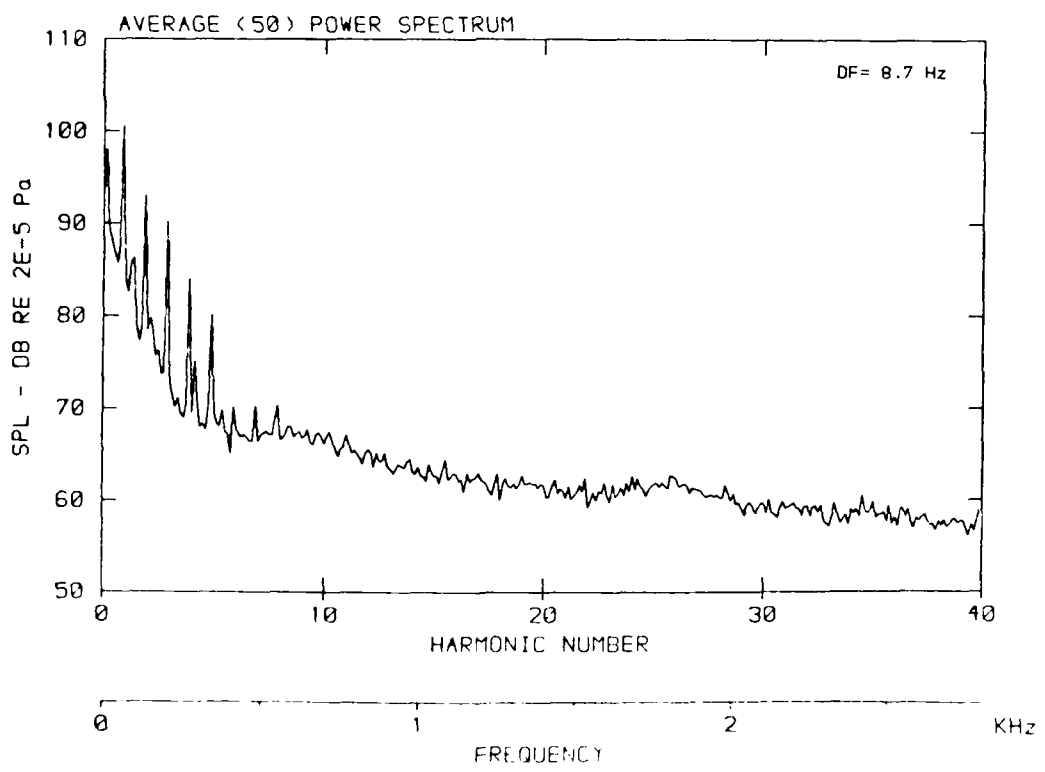
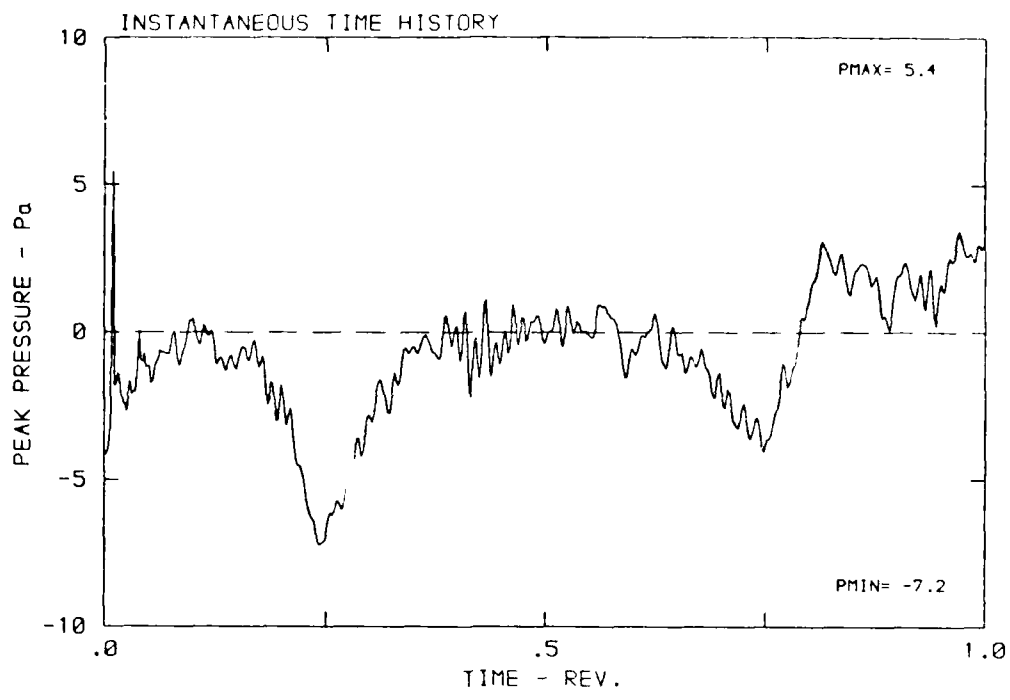
DATA POINT: GC-6 RUN: 147 MP: 9

β : 24.4° MH: .7753 n: 2400 rpm v_{tip} : .262 ϕ : 7.4° T: 285.1 K



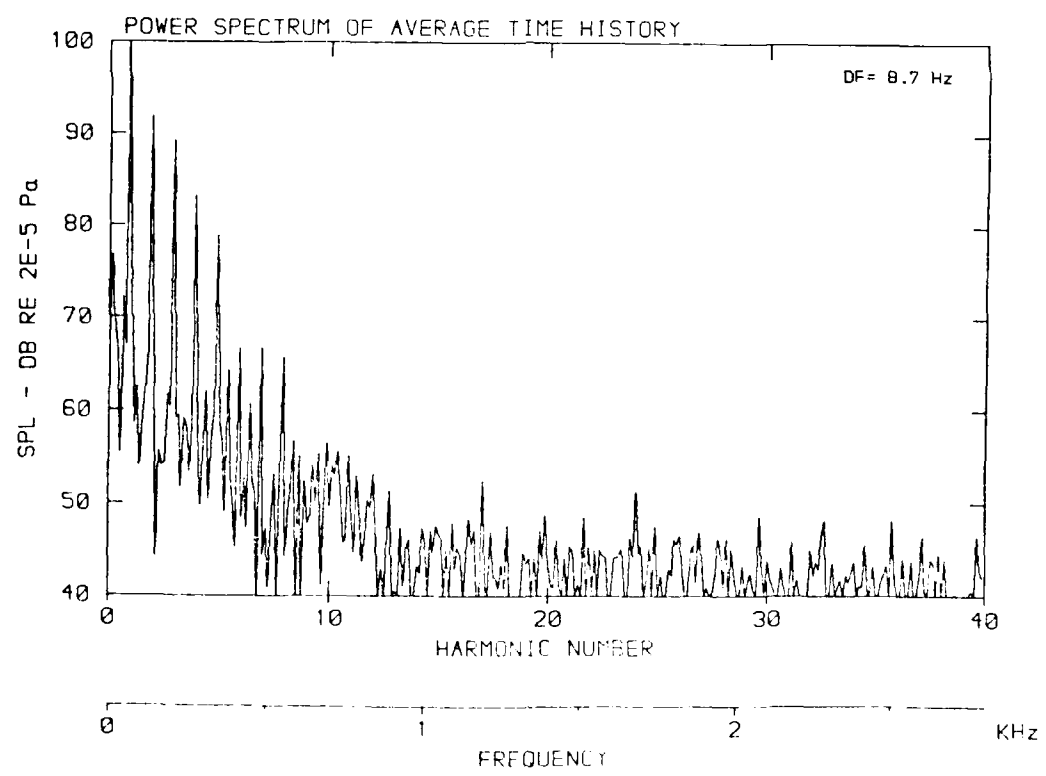
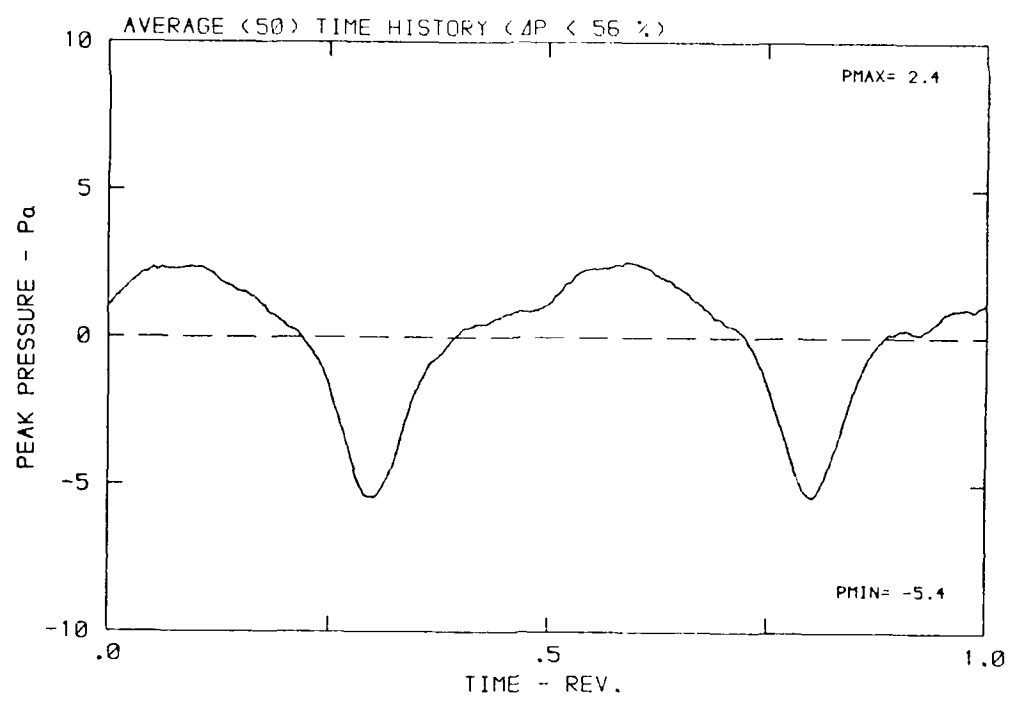
DATA POINT: LC-1 RUN: 139 MP: 1

β : 20.7° MH: .6760 n: 2100 rpm v/u : .231 ϕ : -3.8° T: 286.3 K



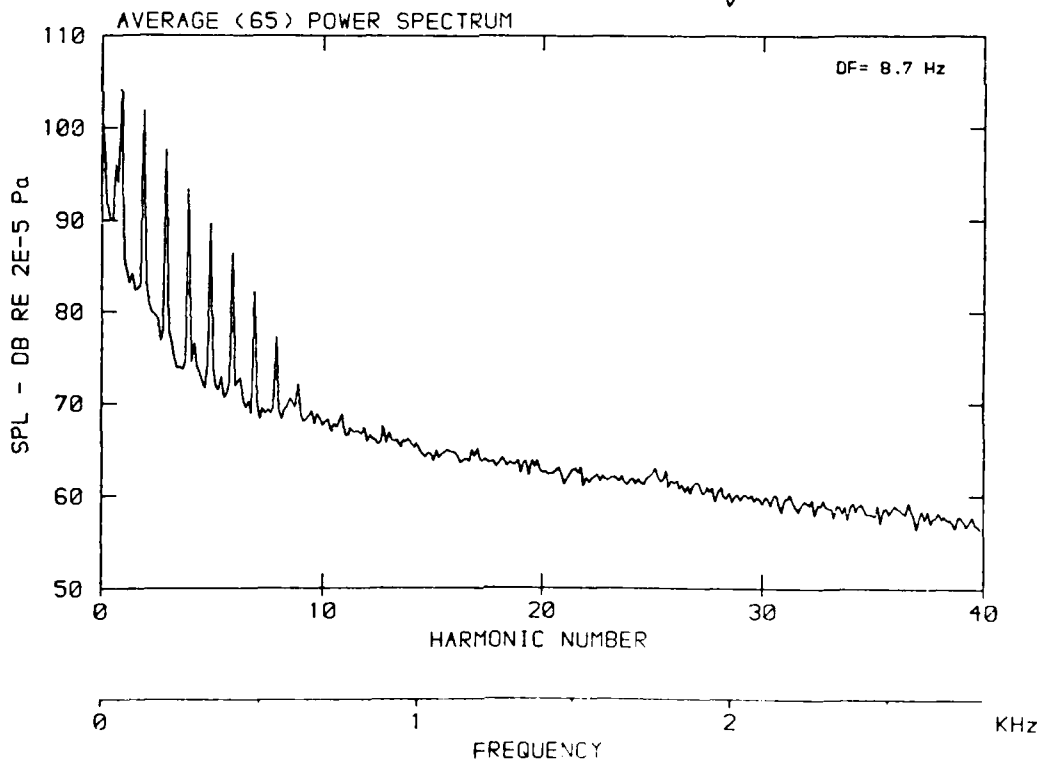
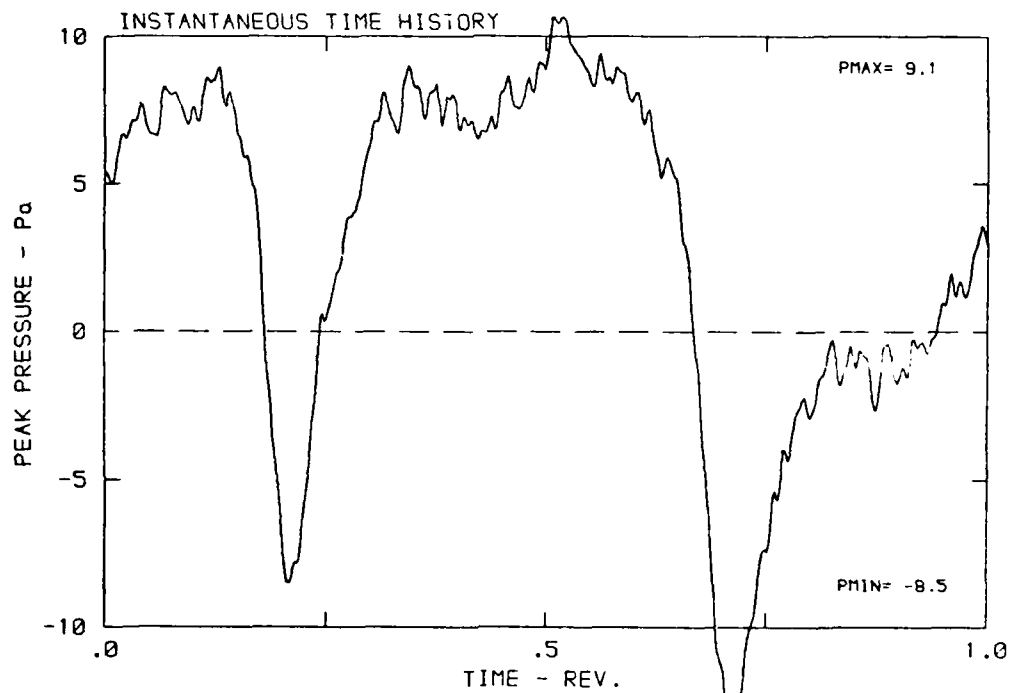
DATA POINT: LC-1 RUN: 139 MP: 1

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 285.3 K



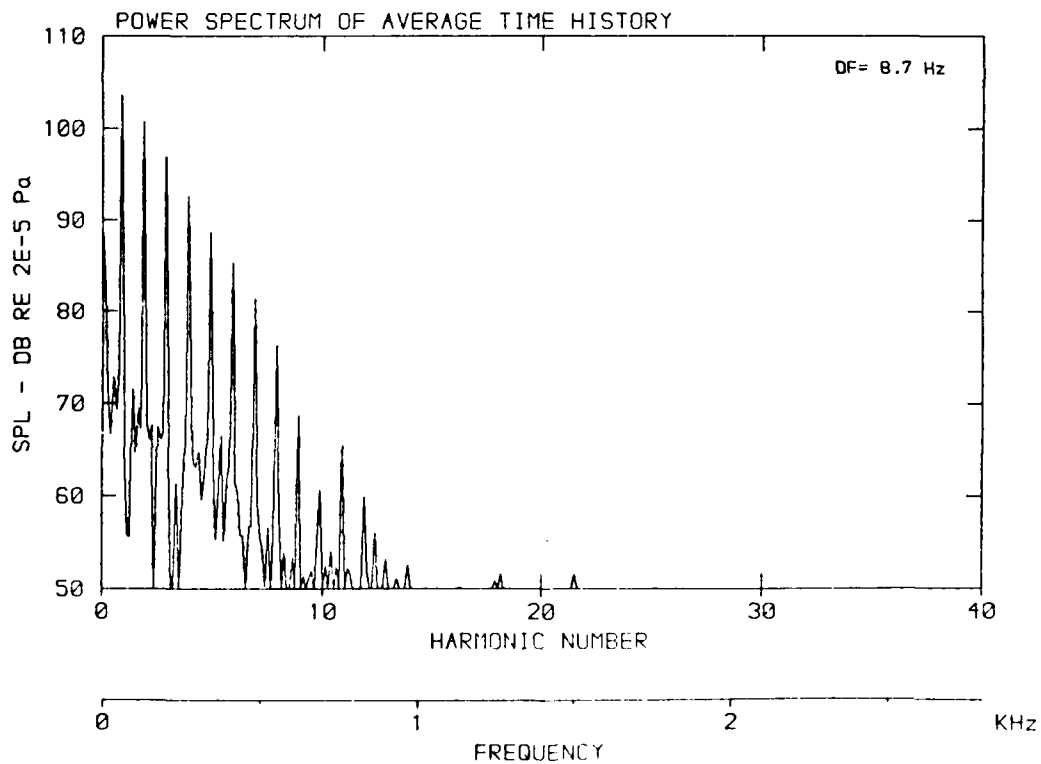
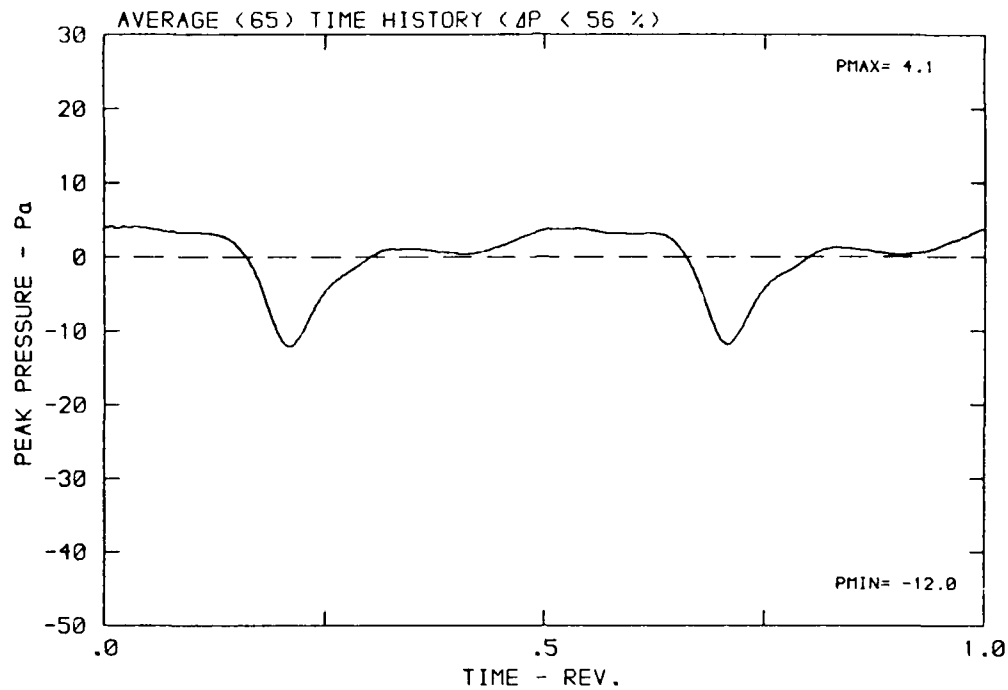
DATA POINT: LC-1 RUN: 139 MP: 2

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 286.3 K



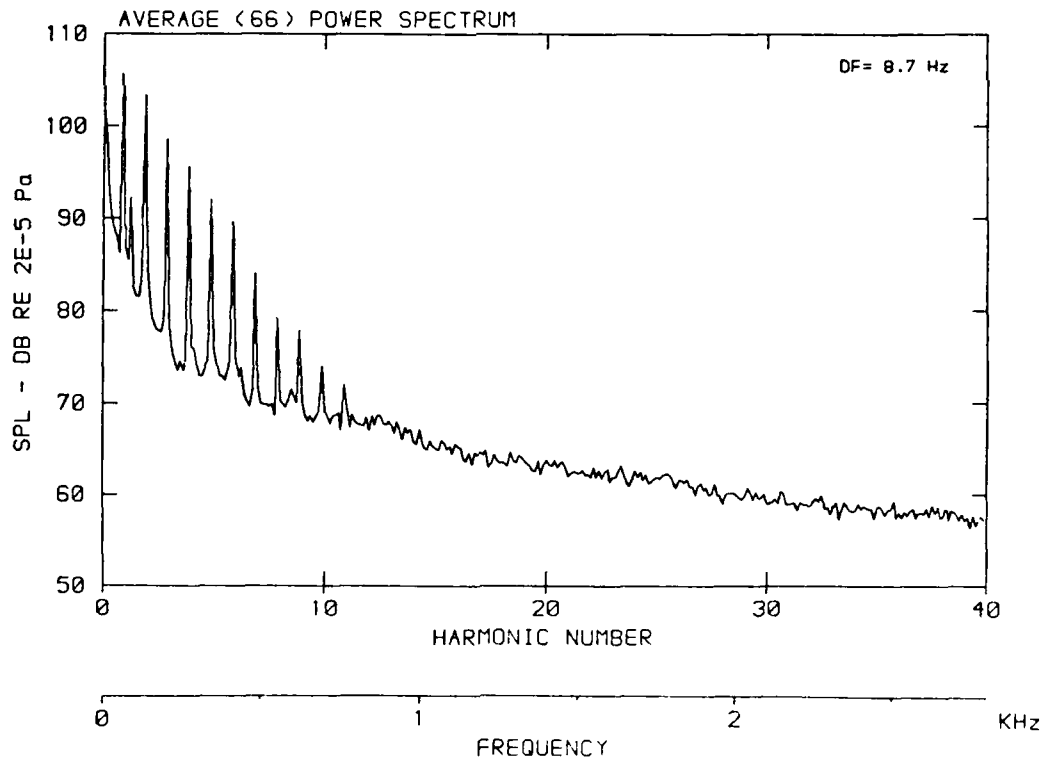
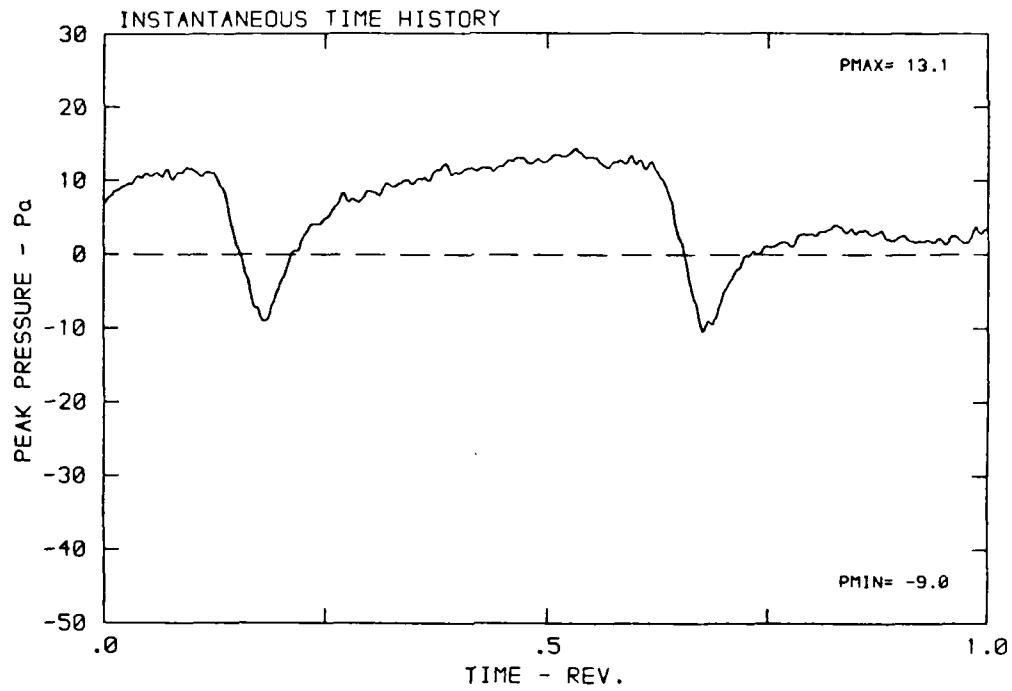
DATA POINT: LC-1 RUN: 139 MP: 2

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 286.3 K



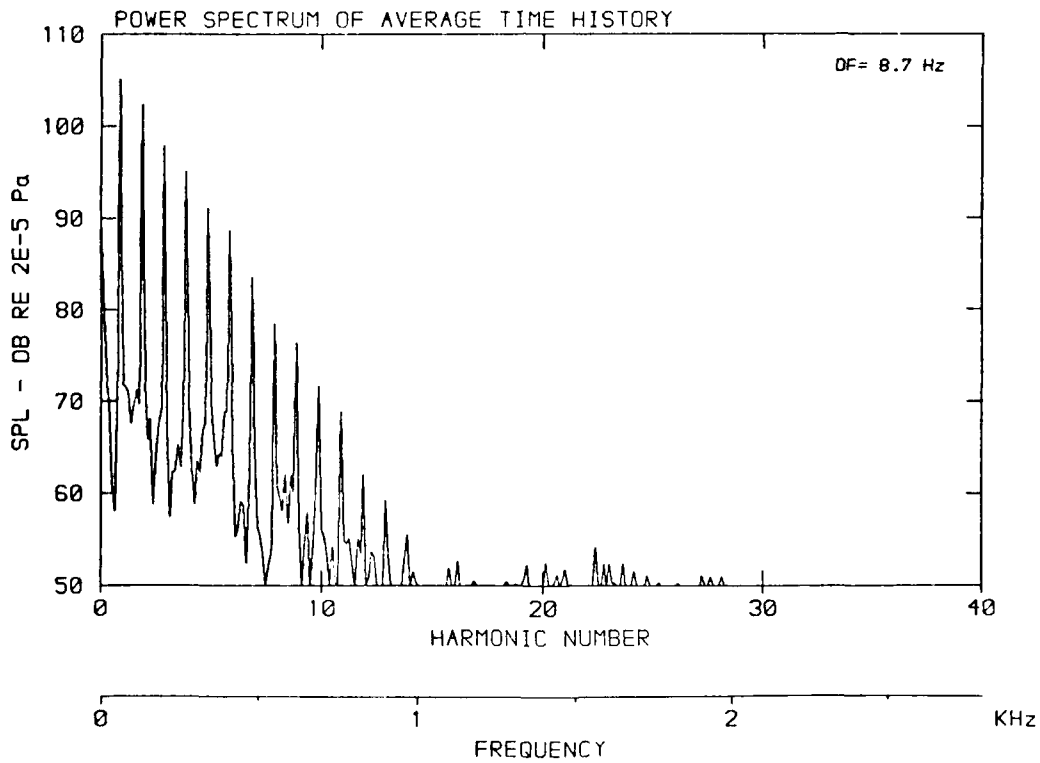
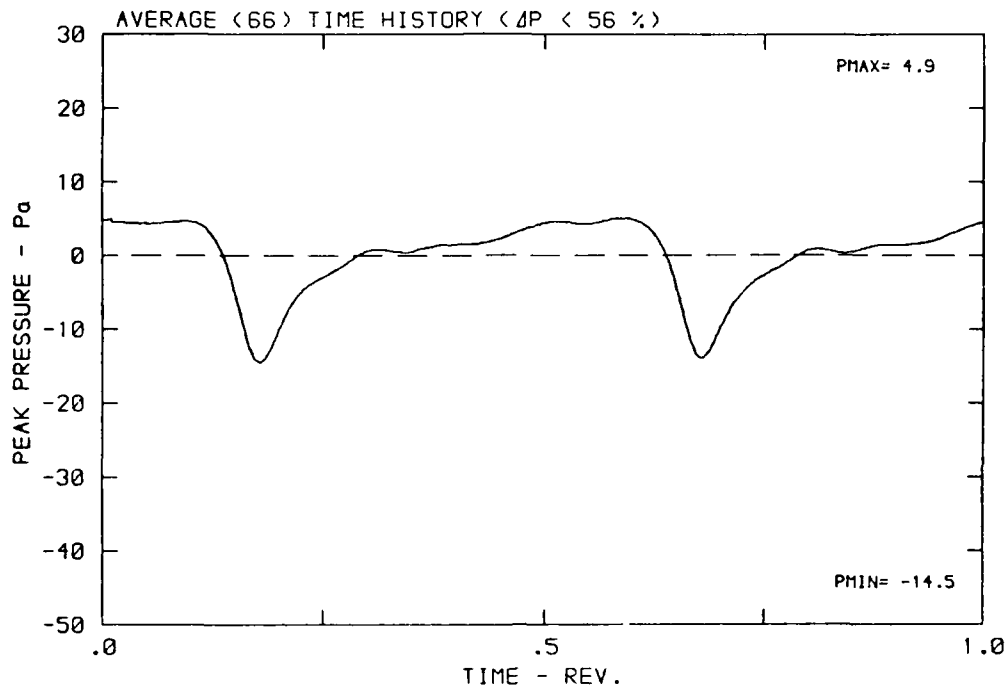
DATA POINT: LC-1 RUN: 139 MP: 3

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 285.3 K



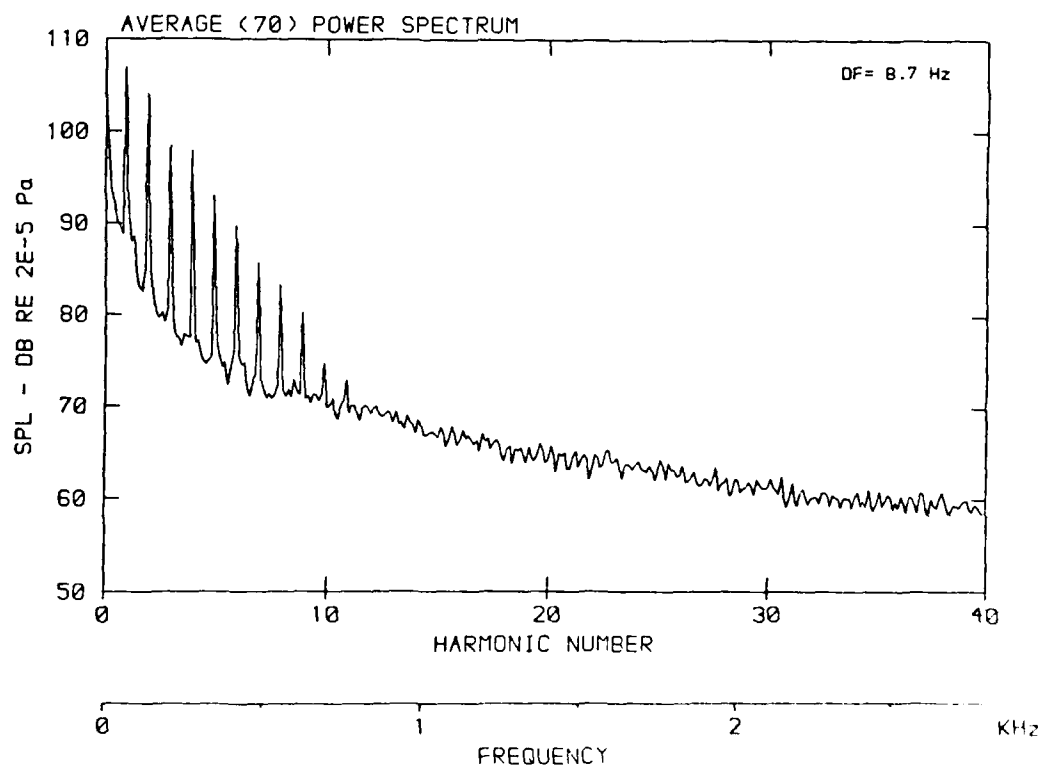
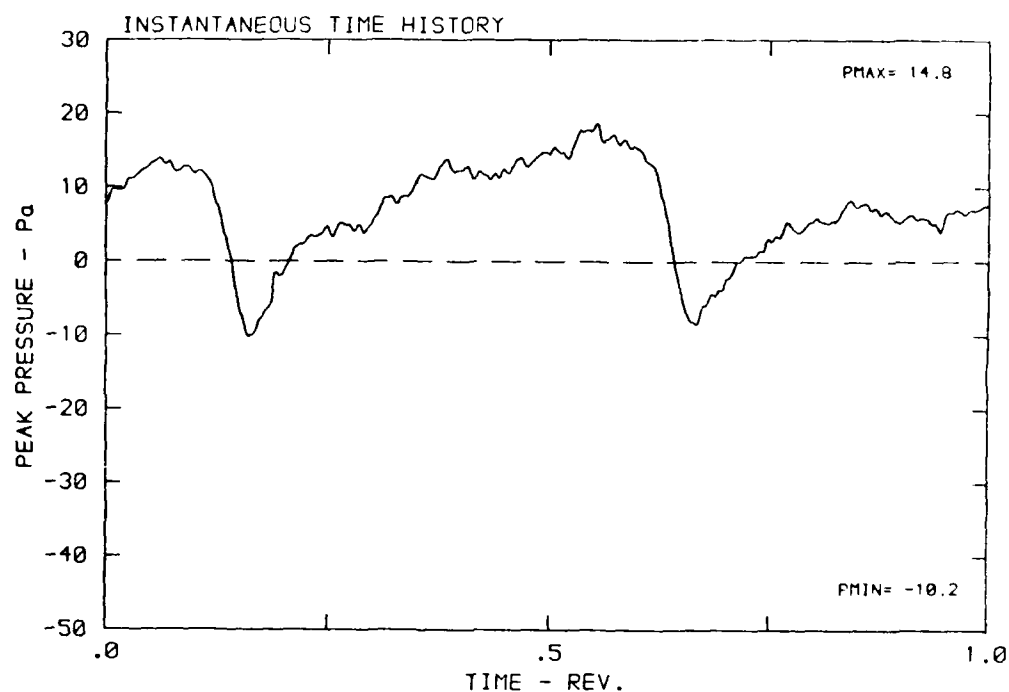
DATA POINT: LC-1 RUN: 139 MP: 3

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 286.3 K



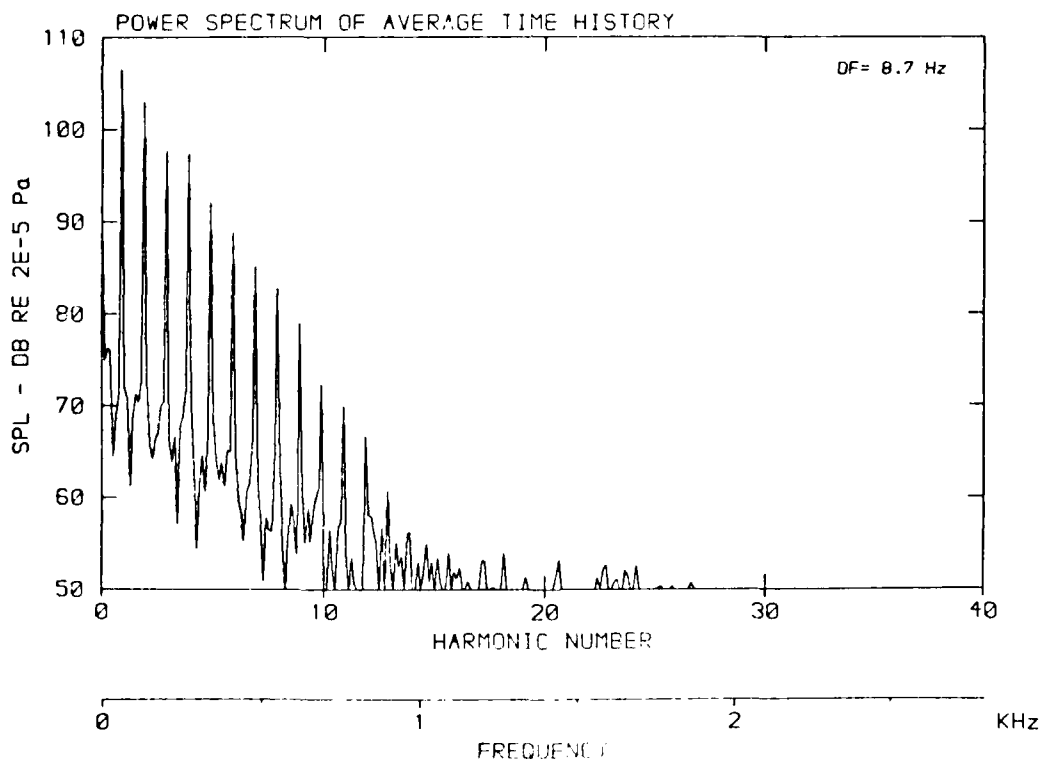
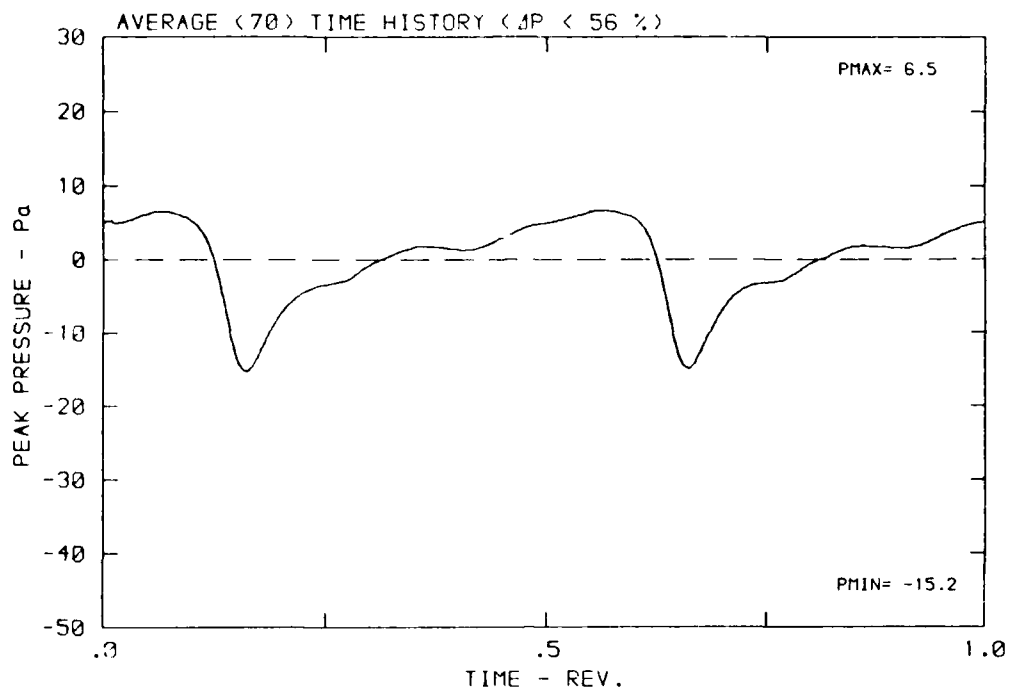
DATA POINT: LC-1 RUN: 139 MP: 4

β : 20.7° MH: .6760 n: 2100 rpm v/u : .231 ϕ : -3.8° T: 236.3



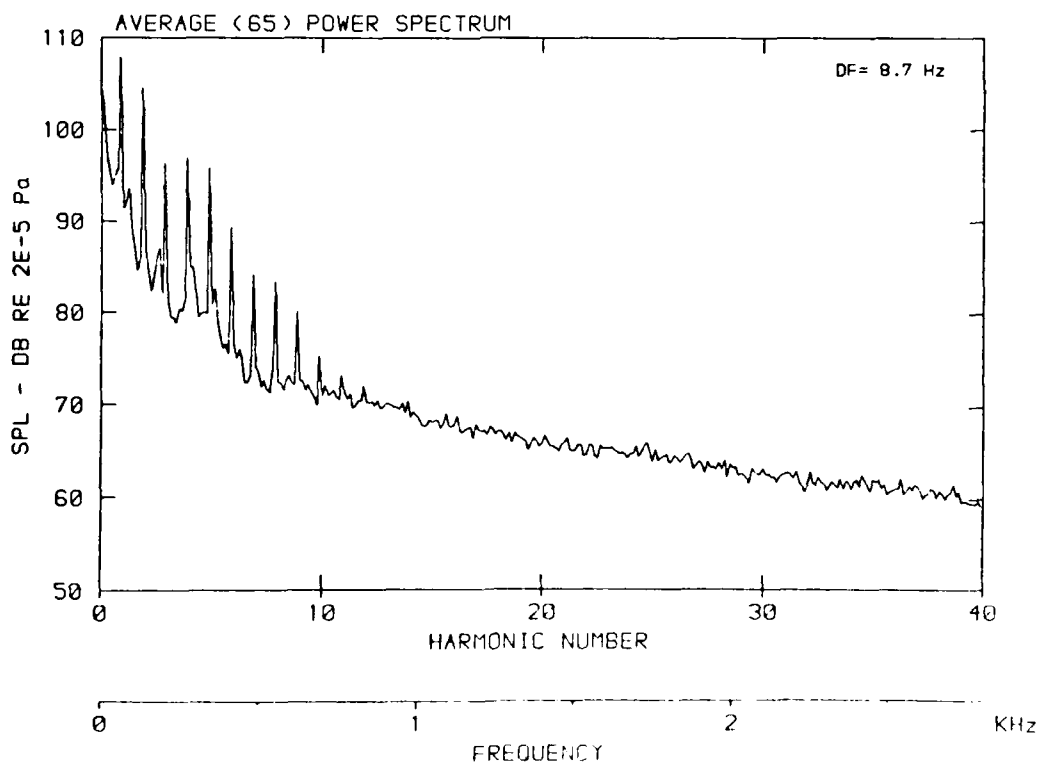
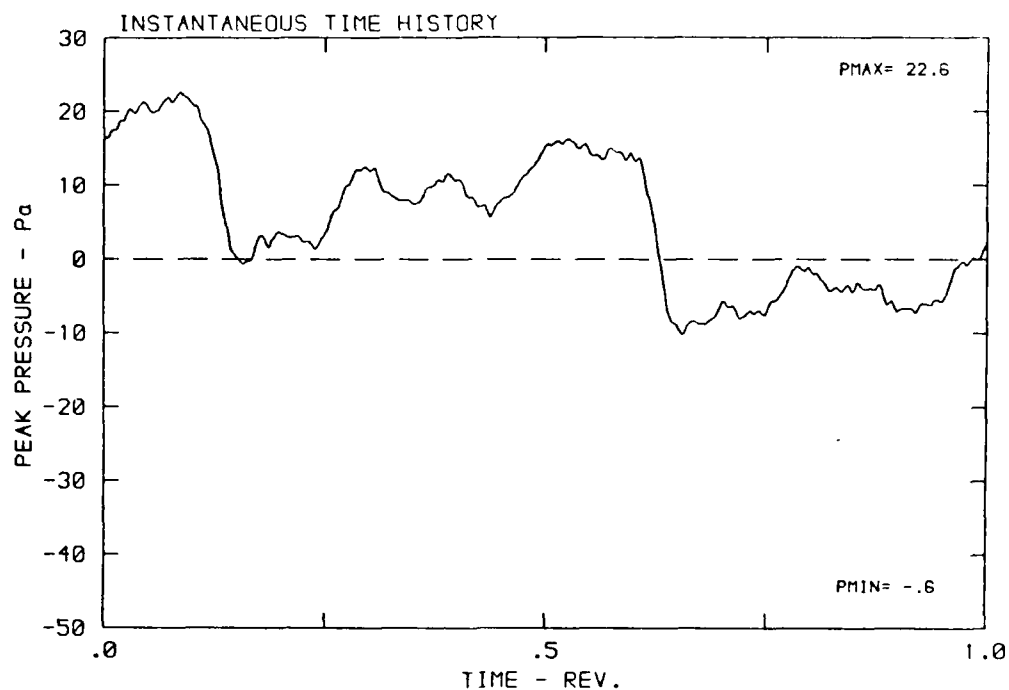
DATA POINT: LC-1 RUN: 139 MP: 4

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 286.3 K



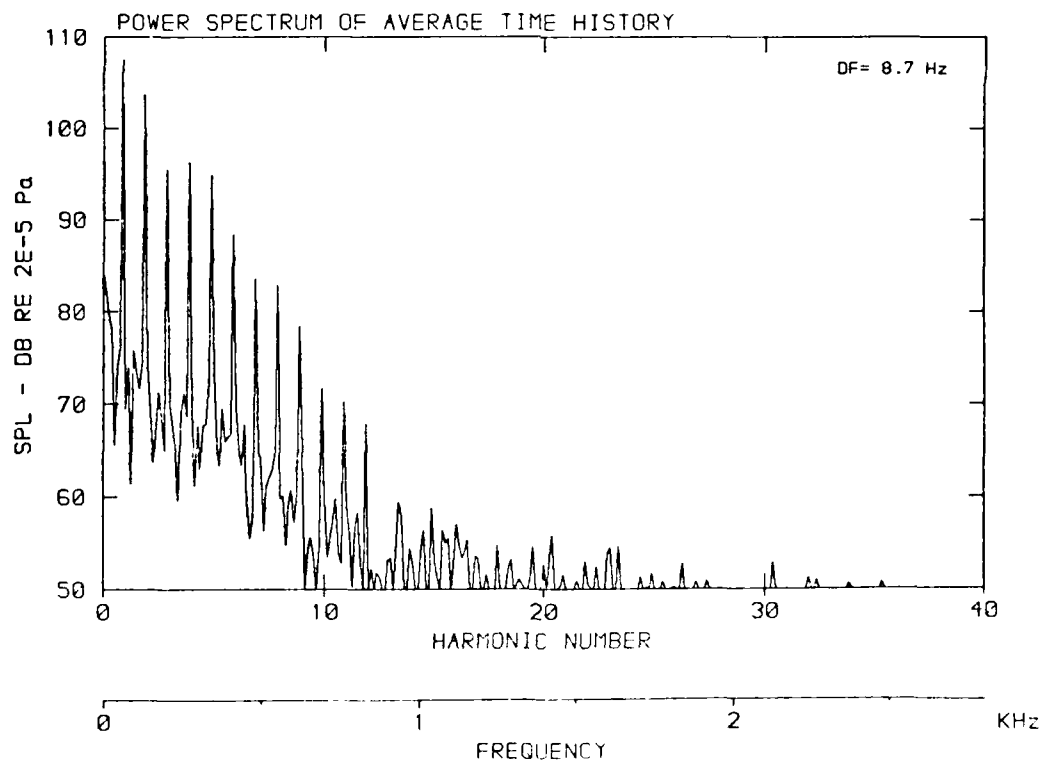
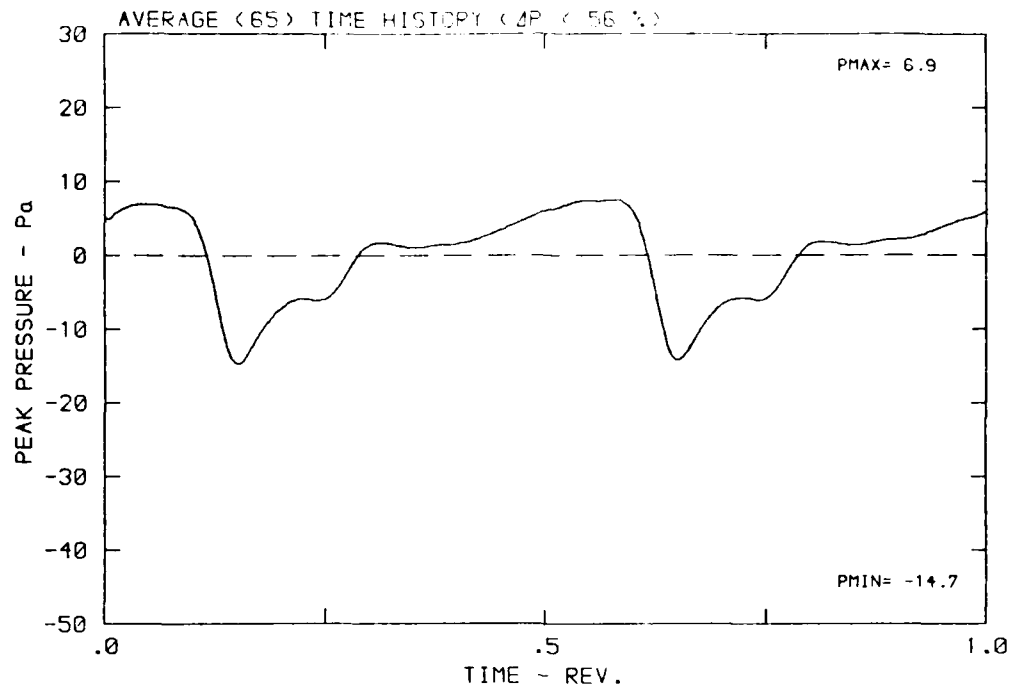
DATA POINT: LC-1 RUN: 139 MP: 5

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 285.3 K



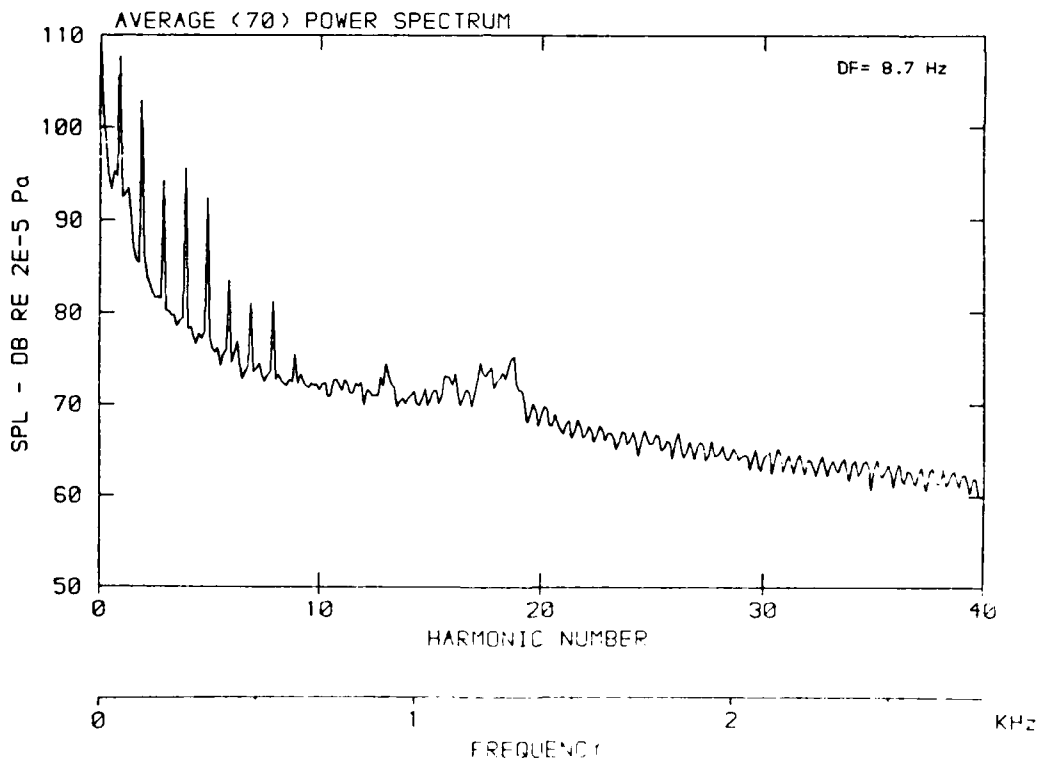
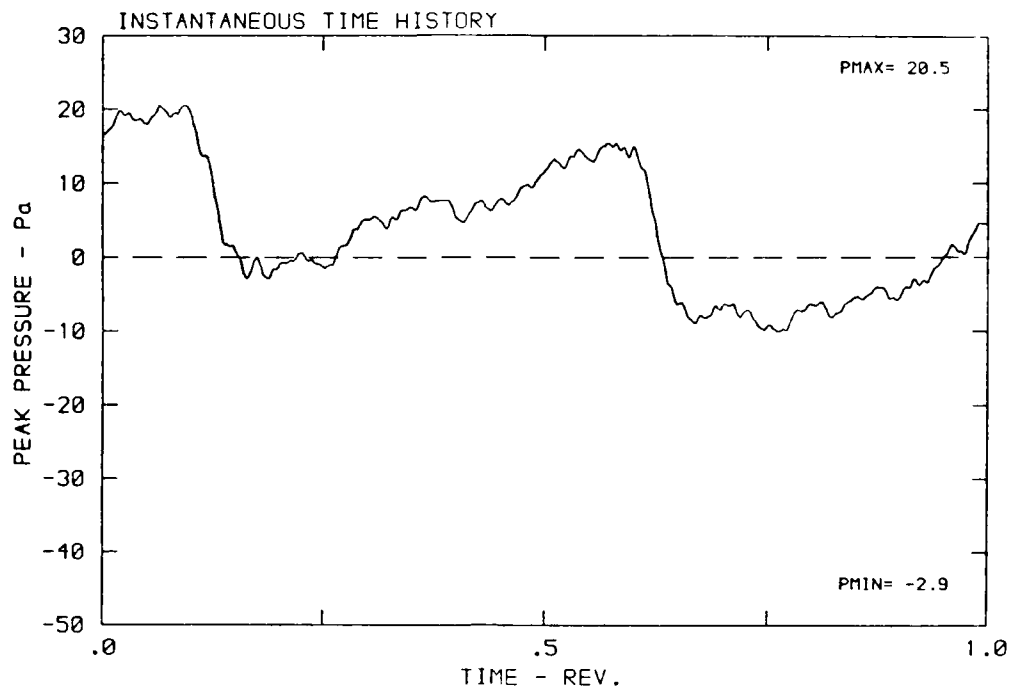
DATA POINT: LC-1 RUN: 139 MP: 5

β : 20.7° MH: .6760 n: 2100 rpm v: .231 ϕ : -3.8° T: 286.3 K



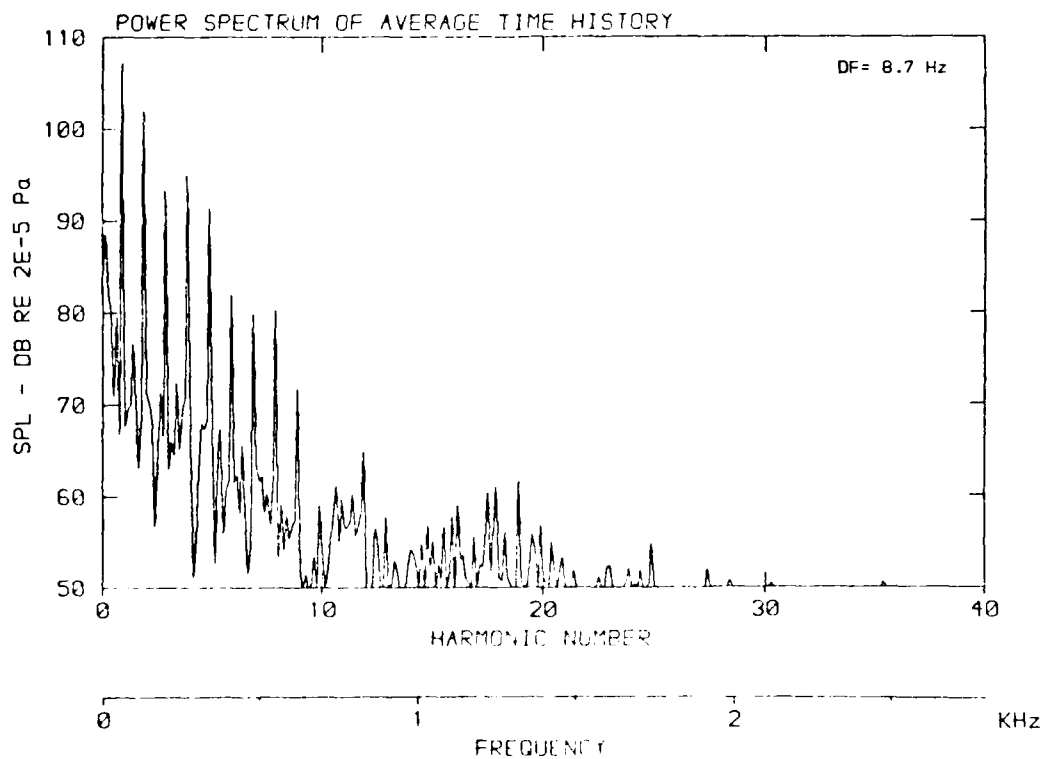
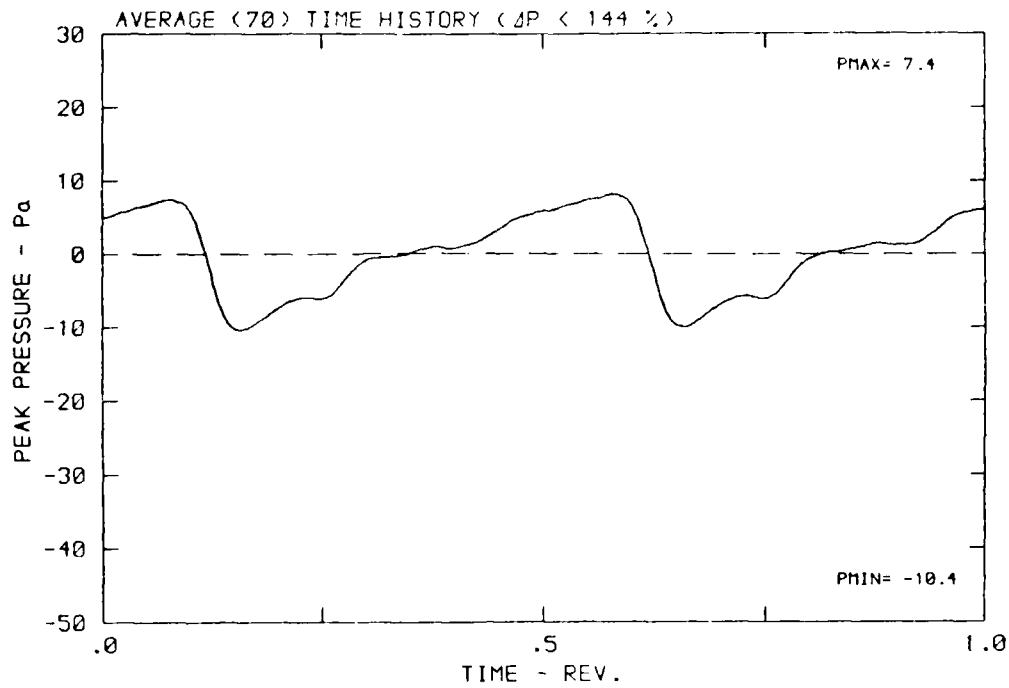
DATA POINT: LC-1 RUN: 139 MP: 6

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 299.3 s



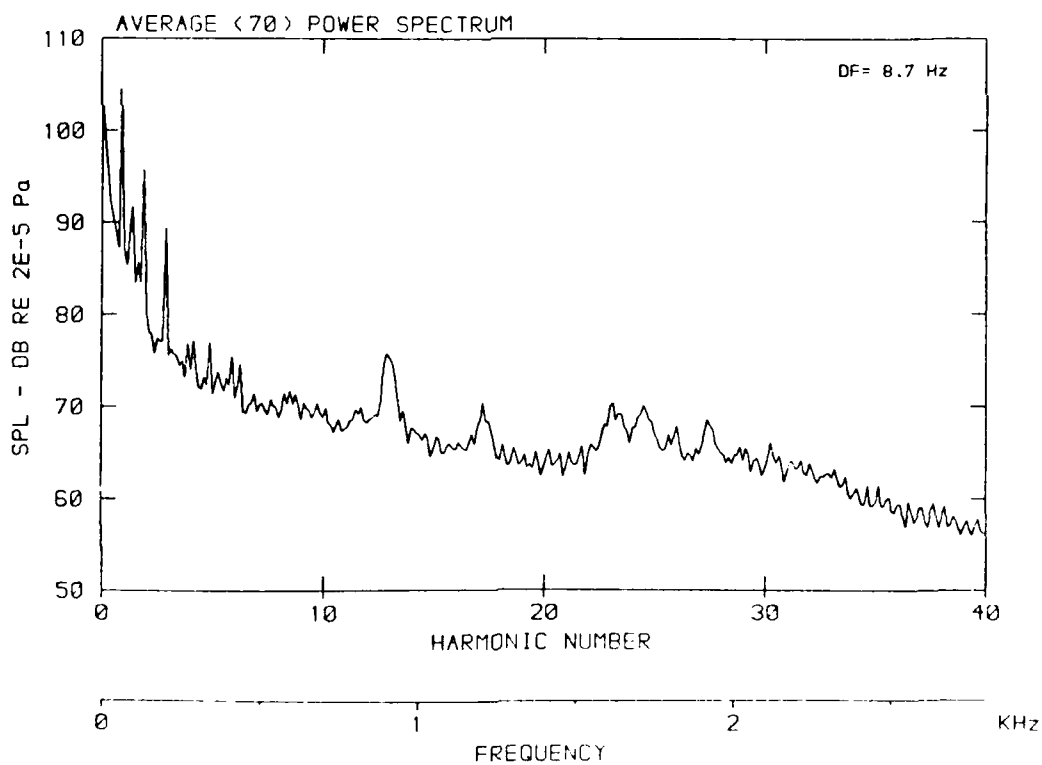
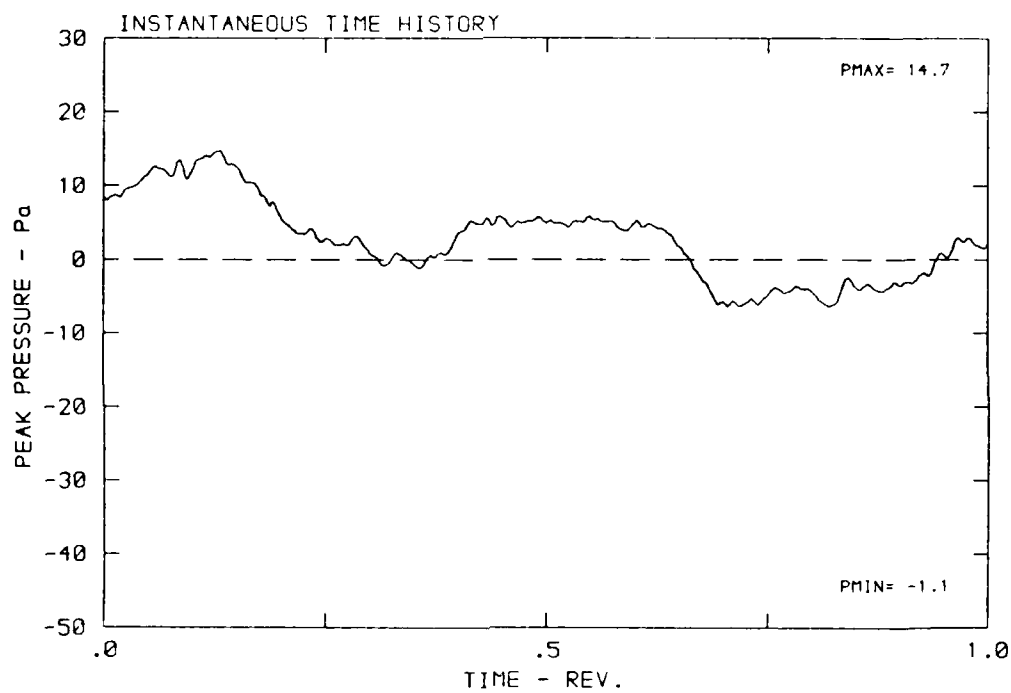
DATA POINT: LC-1 RUN: 139 MP: 6

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 285.3 K



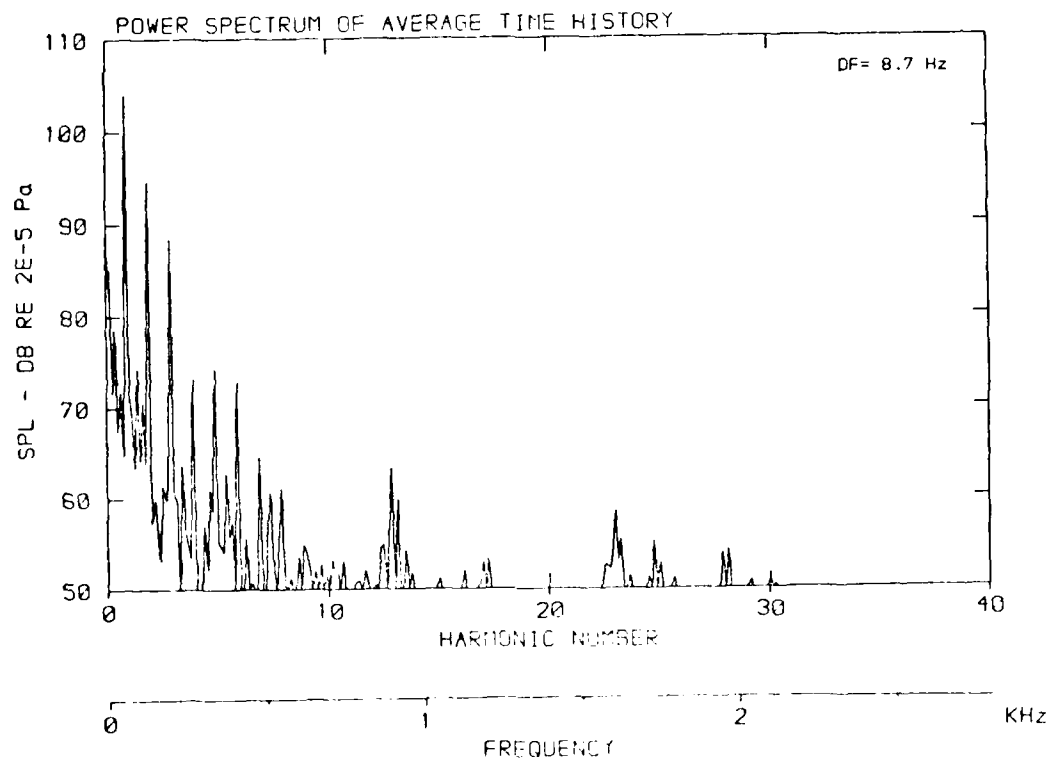
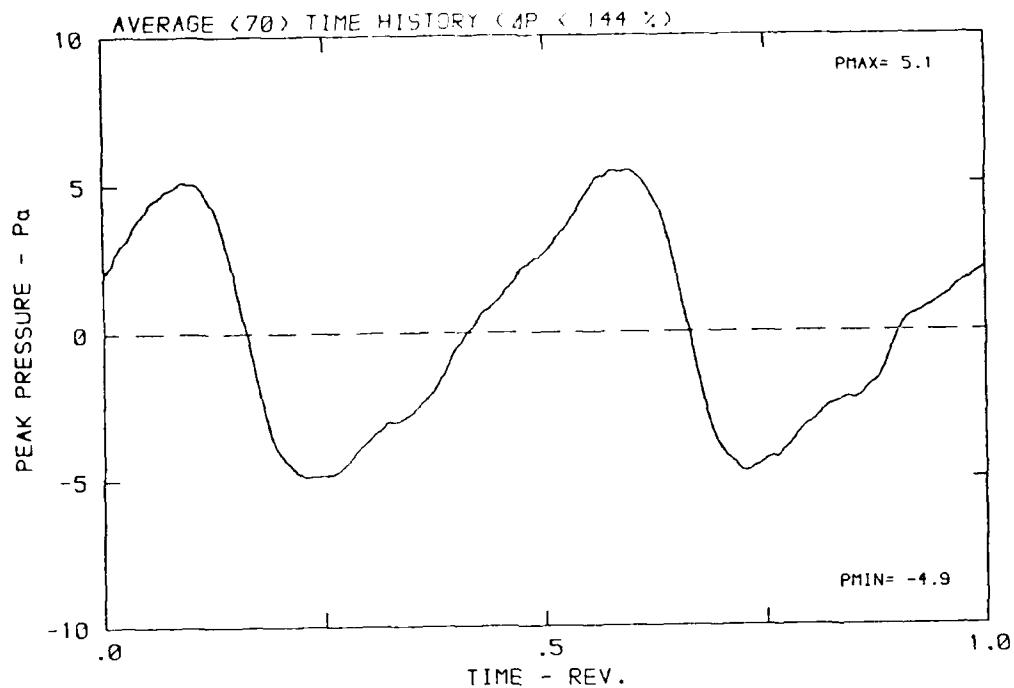
DATA POINT: LC-1 RUN: 139 MP: 7

β : 20.7° MH: .6760 n: 2100 rpm v/u : .231 ϕ : -3.8° T: 296.3



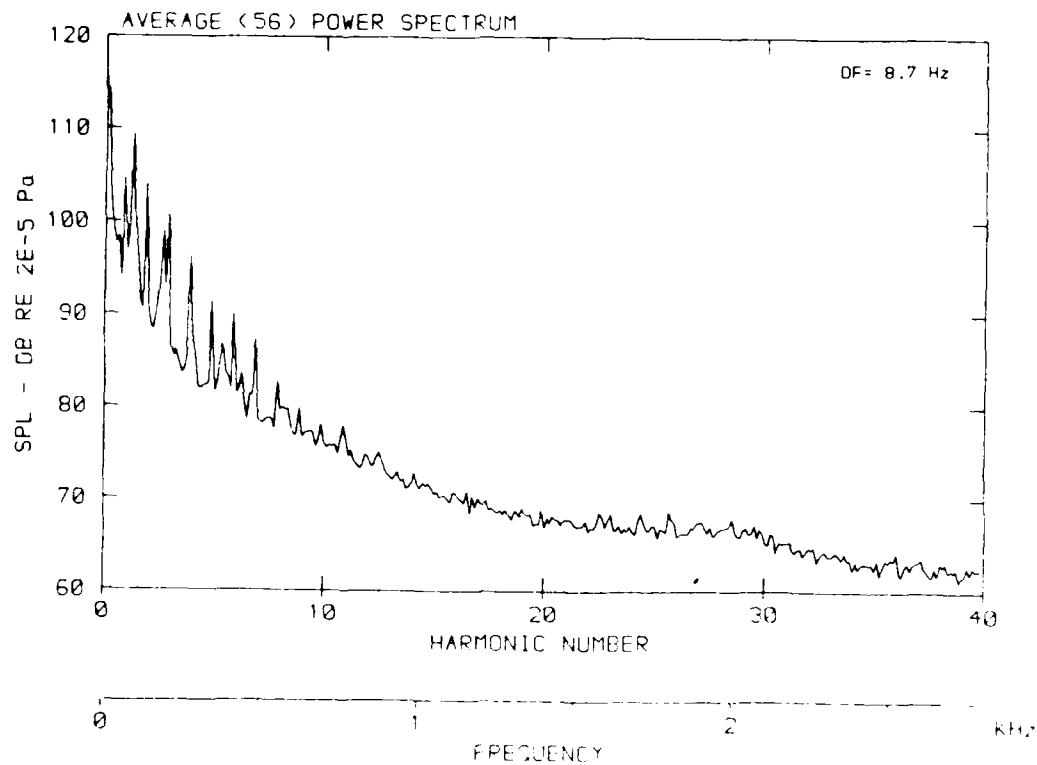
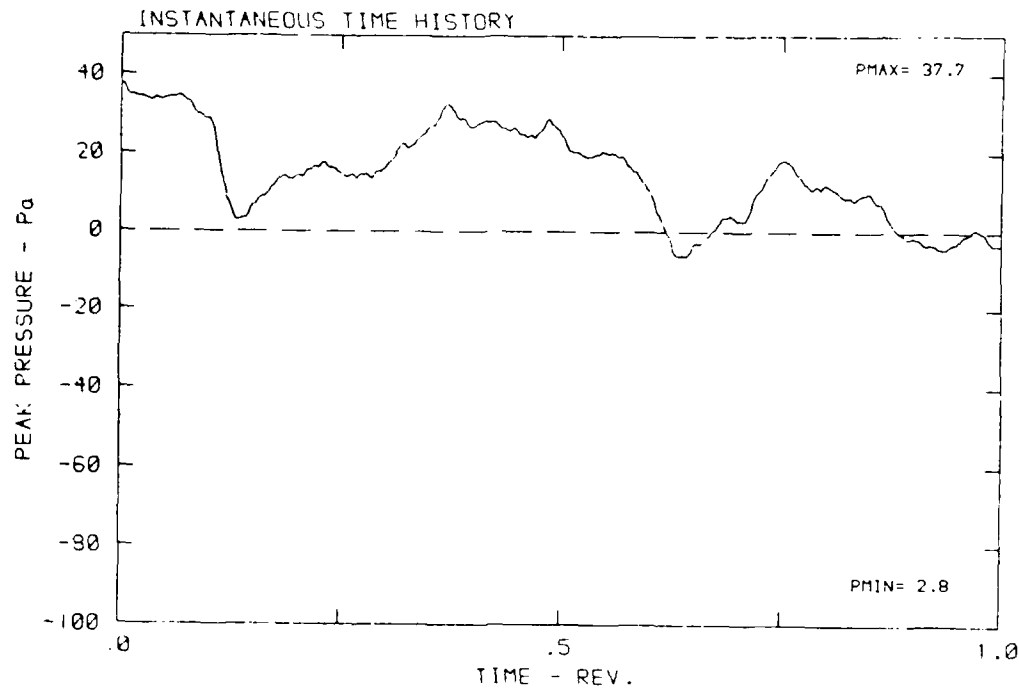
DATA POINT: LC-1 RUN: 139 MP: 7

β : 20.7° MH: .6760 n: 2100 rpm v/u : .231 ϕ : -3.8° T: 286.3 K



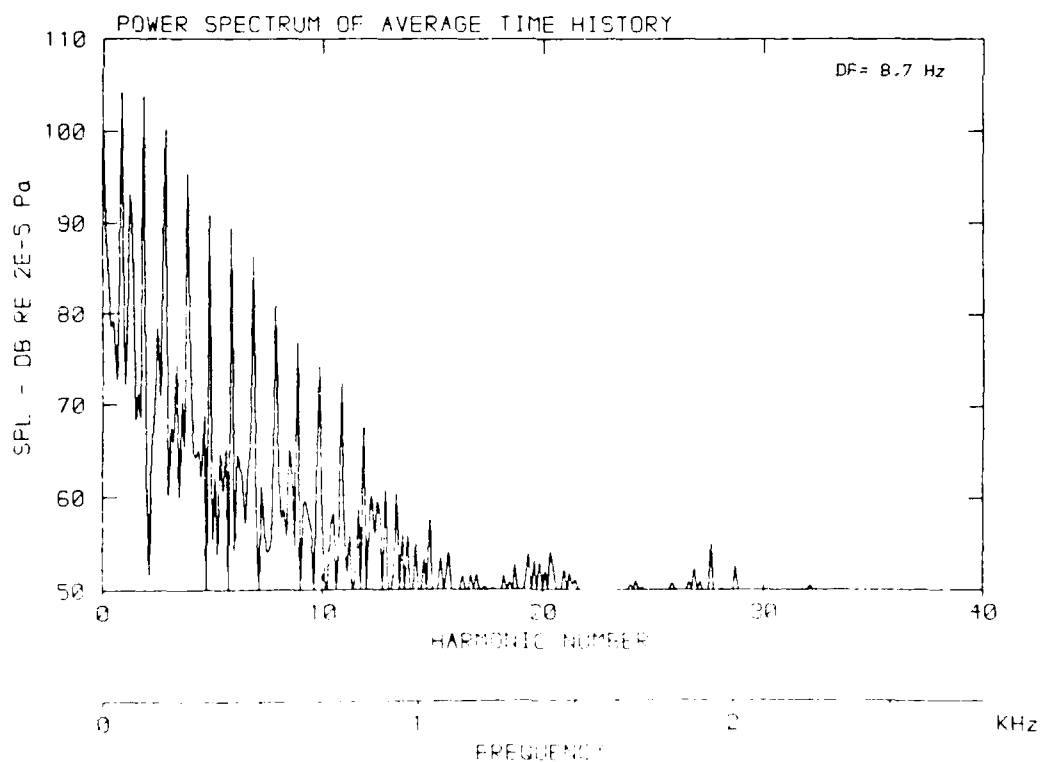
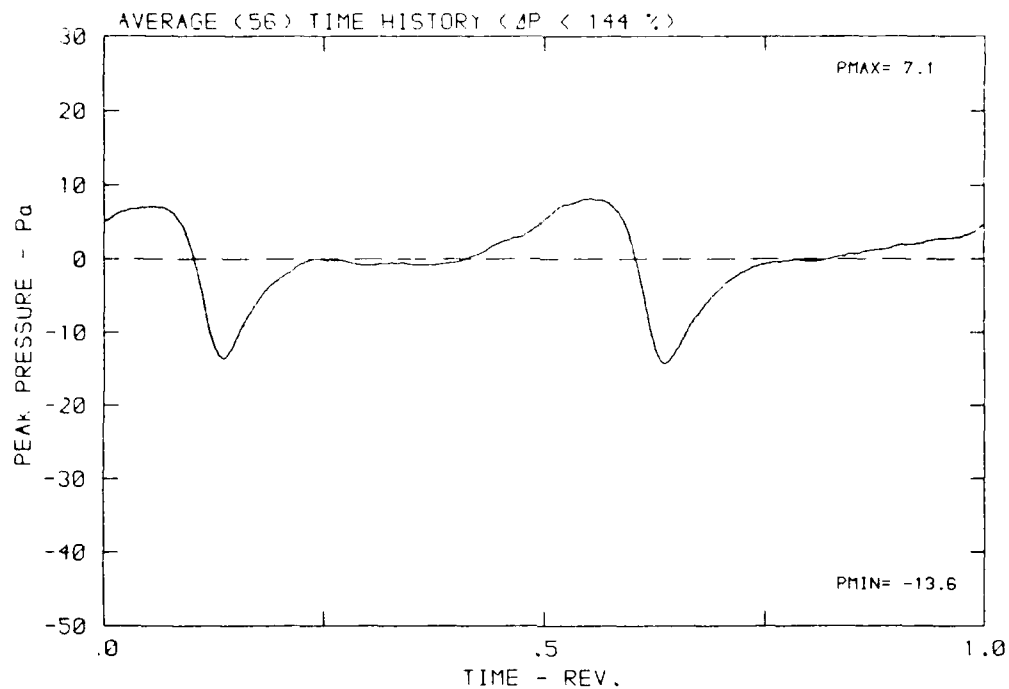
DATA POINT: LC-1 RUN: 139 MP: 8

β : 20.7° MH: .6760 n: 2100 rpm v/u : .231 ϕ : -3.8° T: 286.3 K



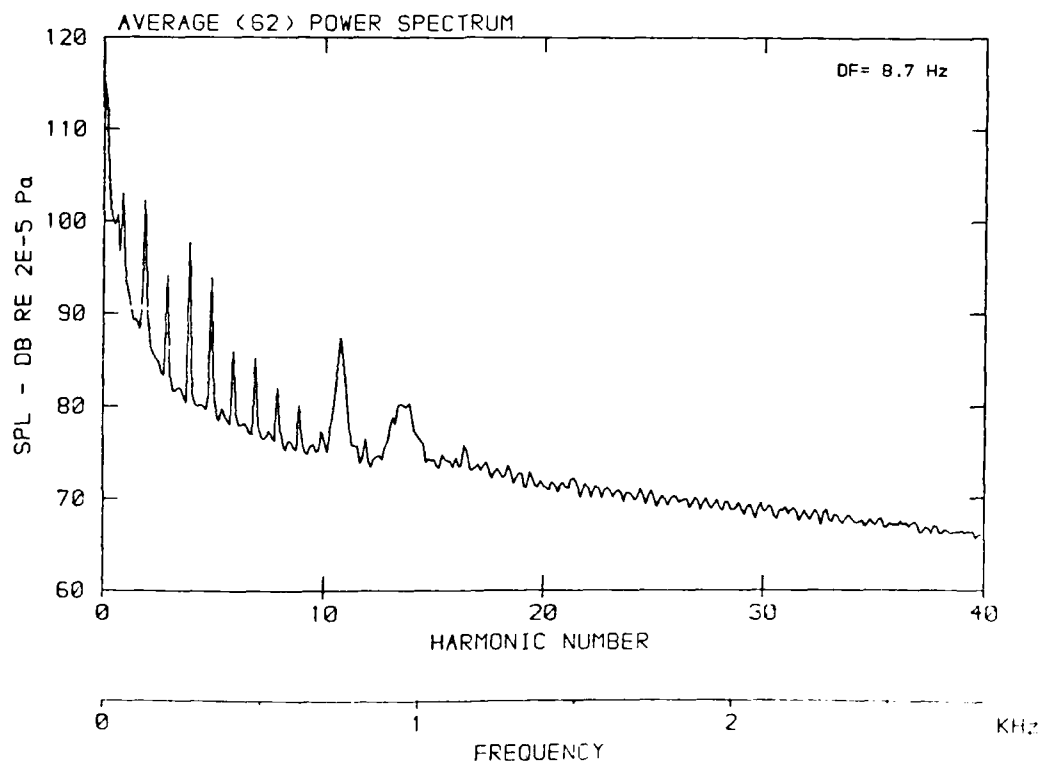
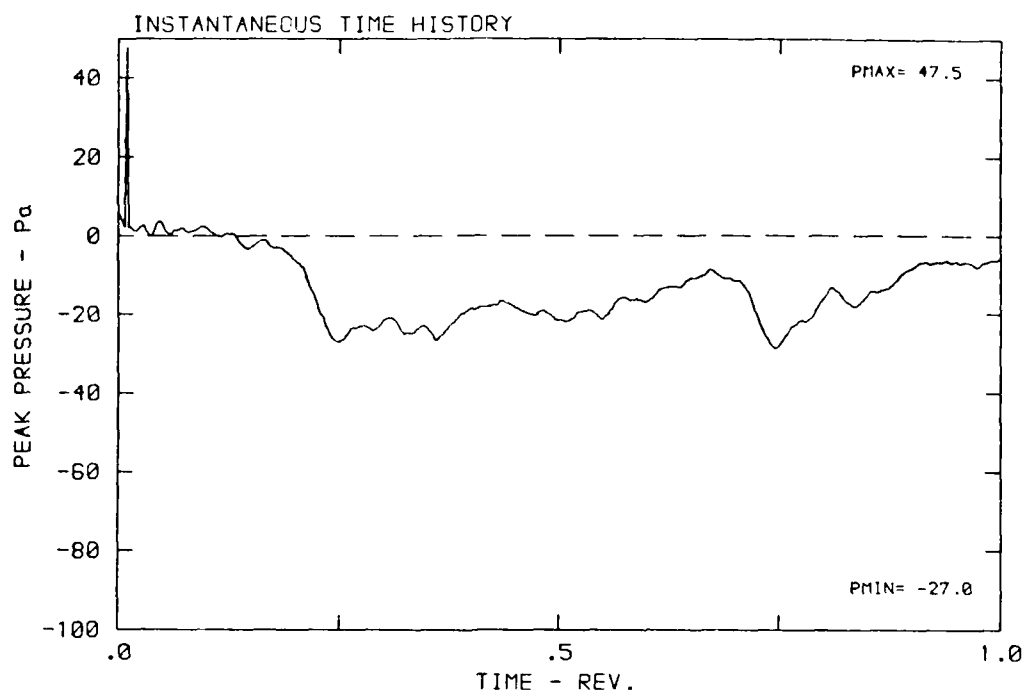
DATA POINT : LC-1 RUN : 139 MP : 8

β : 20.7° MH : .6760 n : 2100 rpm v/u : .231 ϕ : -3.8° T : 286.3 K



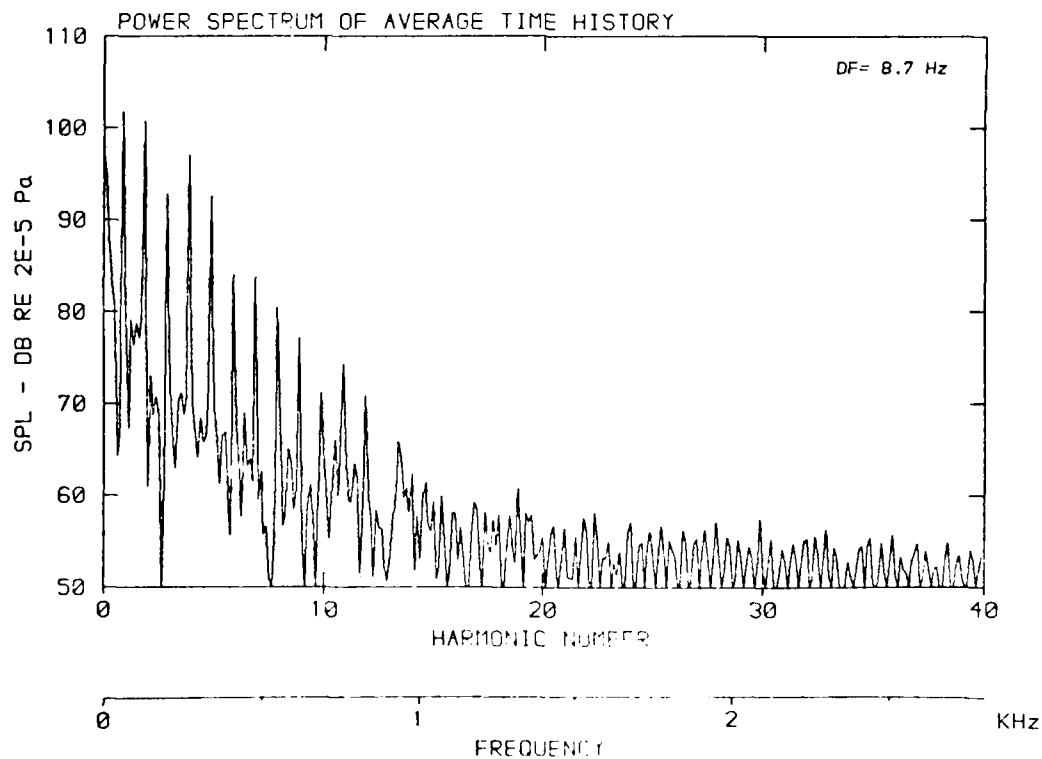
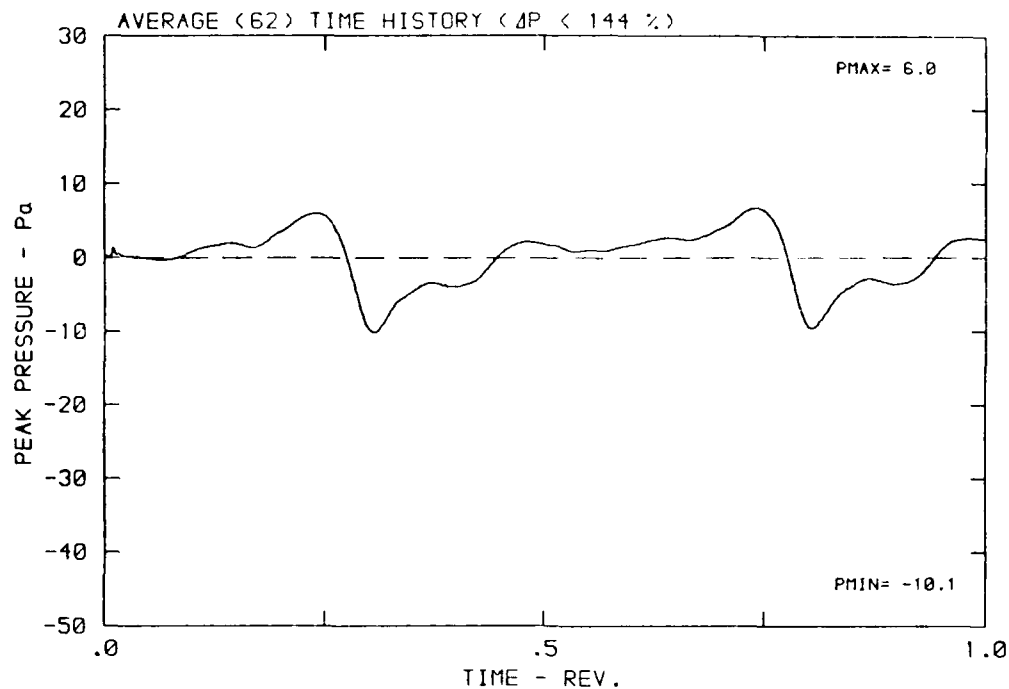
DATA POINT: LC-1 RUN: 139 MP: 9

β : 20.7° MH: .6760 n: 2100 rpm v/u: .231 ϕ : -3.8° r: 0.082 %



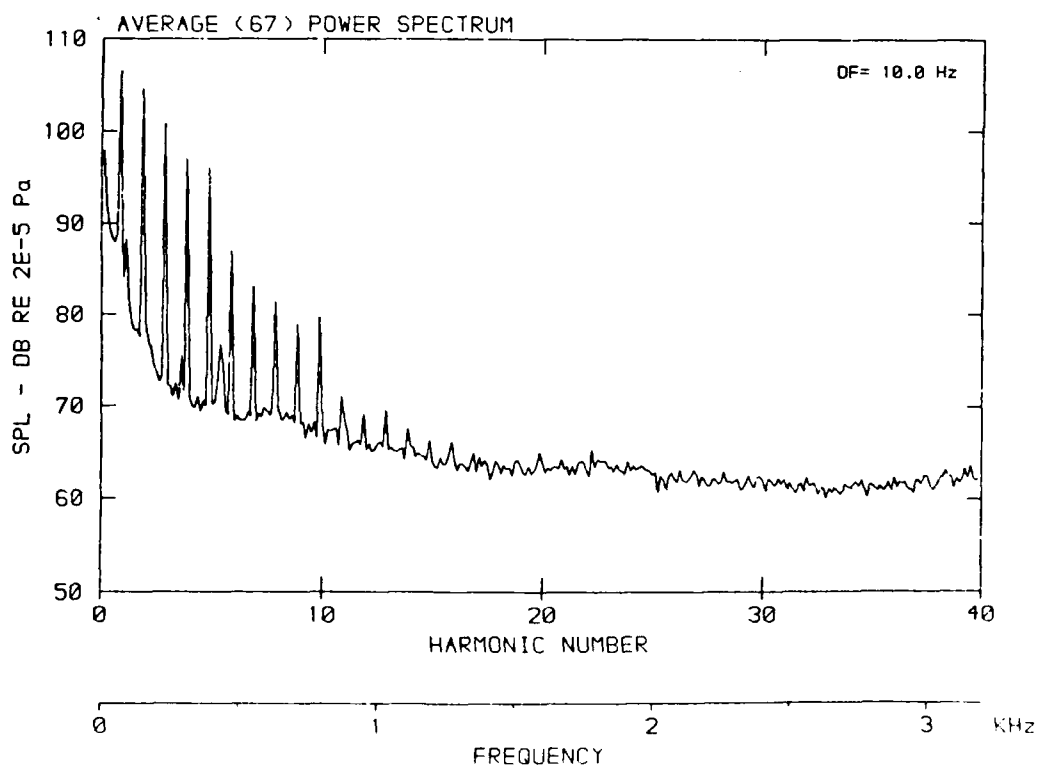
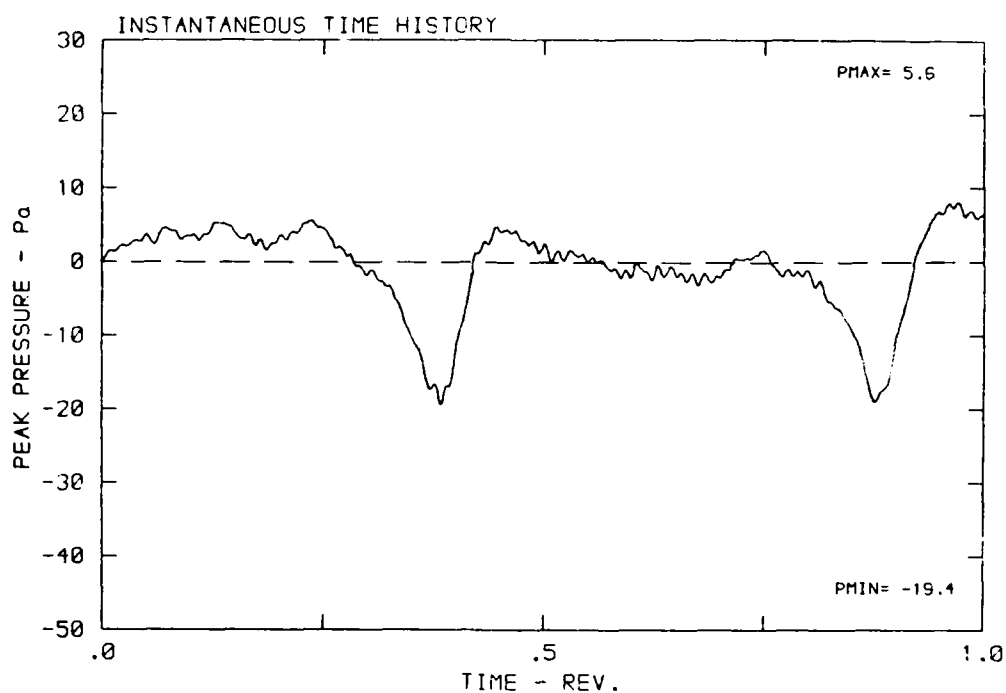
DATA POINT: LC-1 RUN: 139 MP: 9

β : 20.7° MH: .6760 n: 2100 rpm v/u : .231 ϕ : -3.8° T: 286.3 K



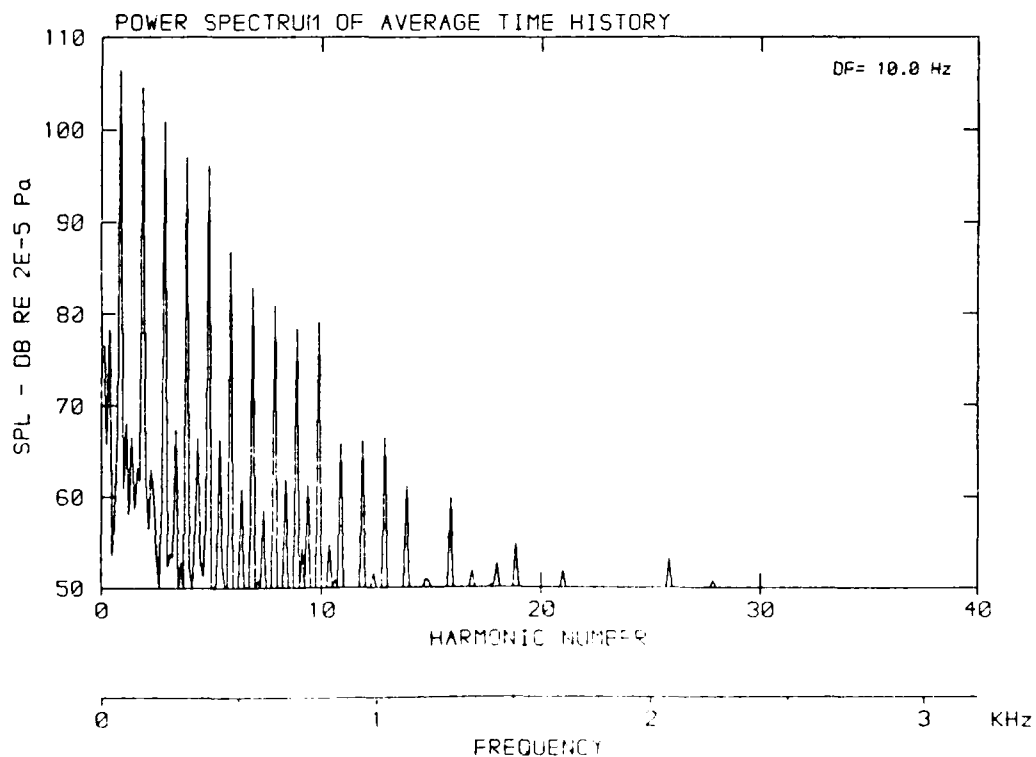
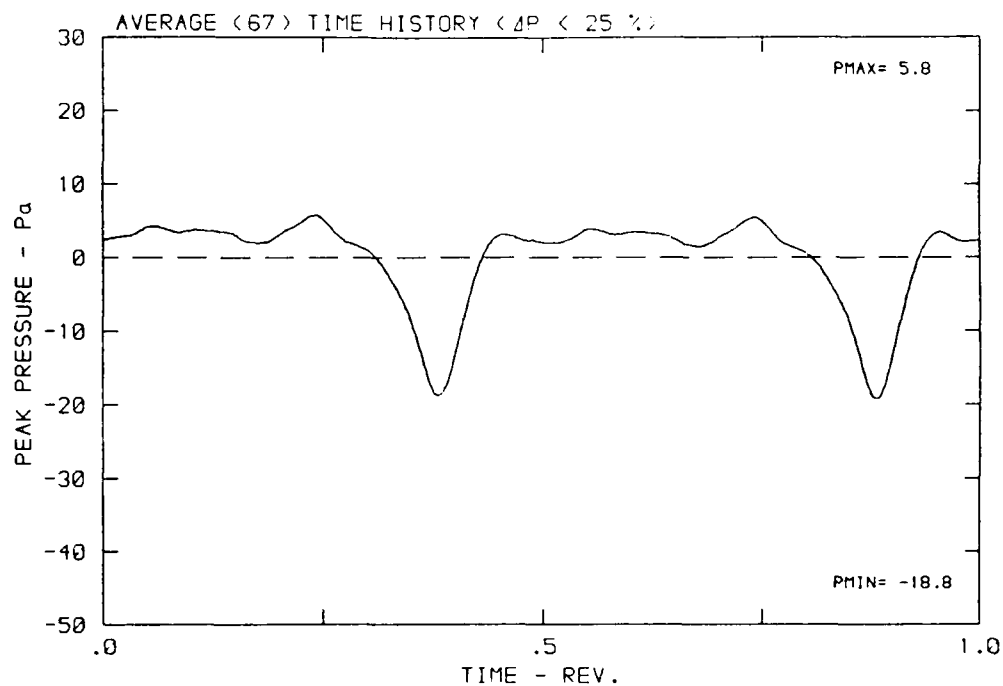
DATA POINT: LC-2 RUN: 140 MP: 1

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 256.6 μ



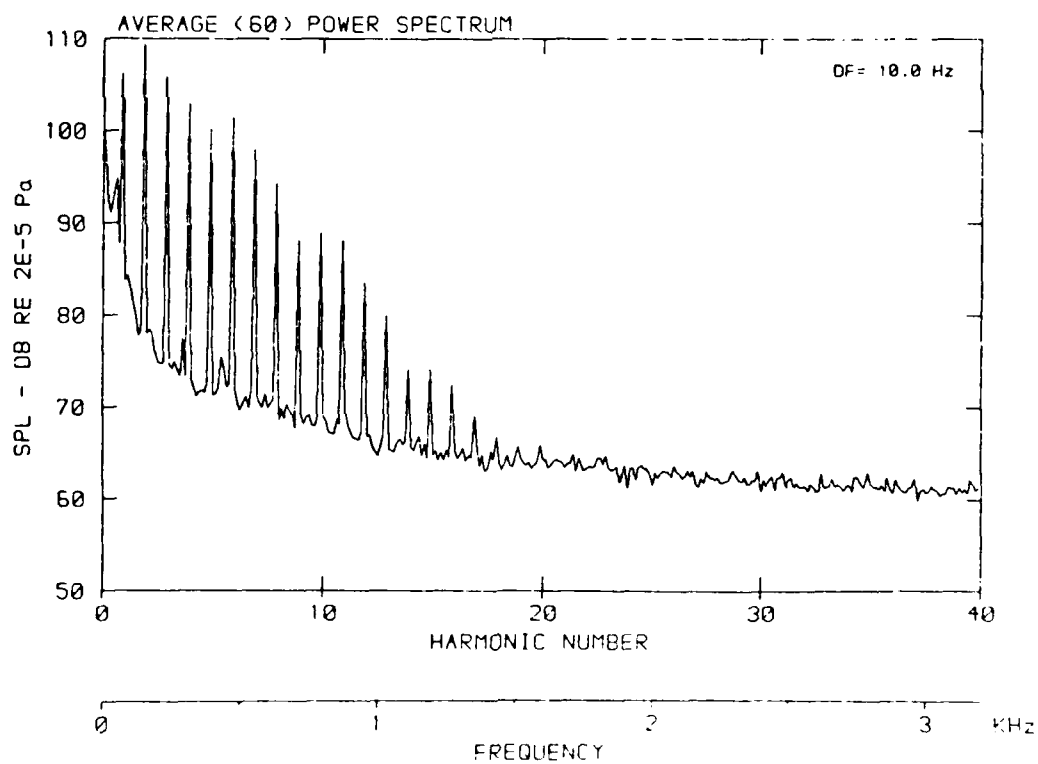
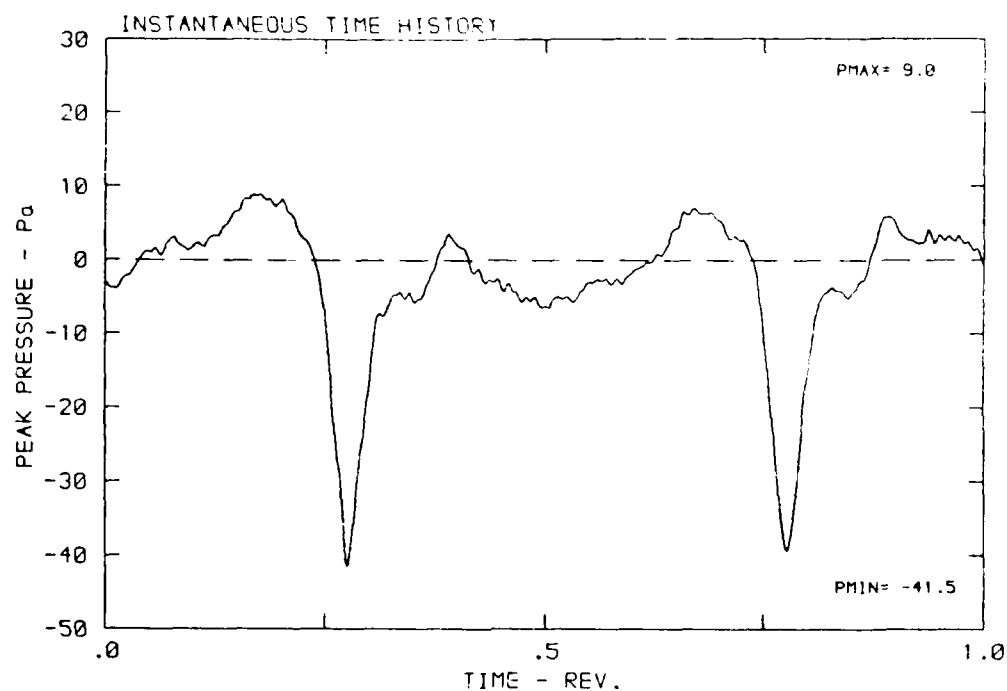
DATA POINT: LC-2 RUN: 140 MP: 1

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 286.6 K



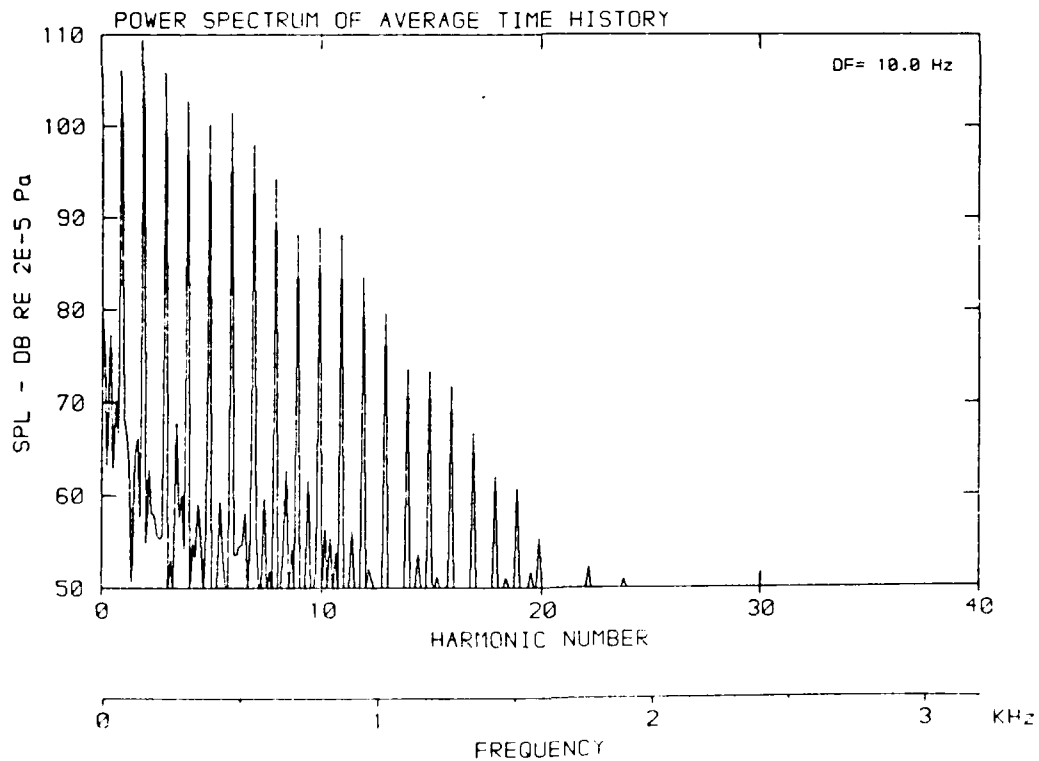
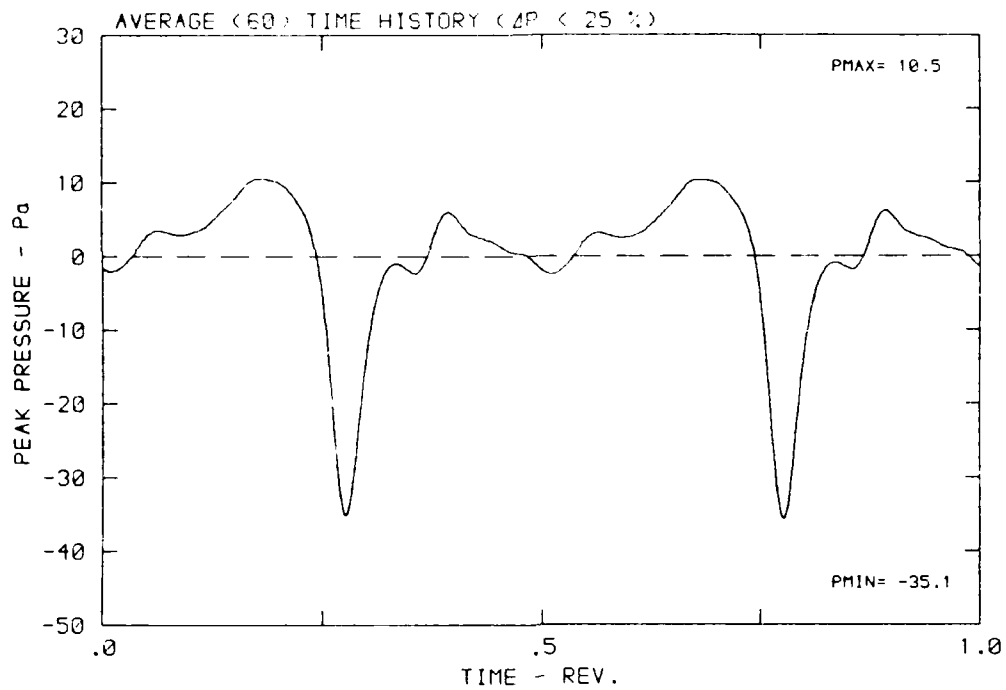
DATA POINT: LC-2 RUN: 140 MP: 2

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 288.6 r



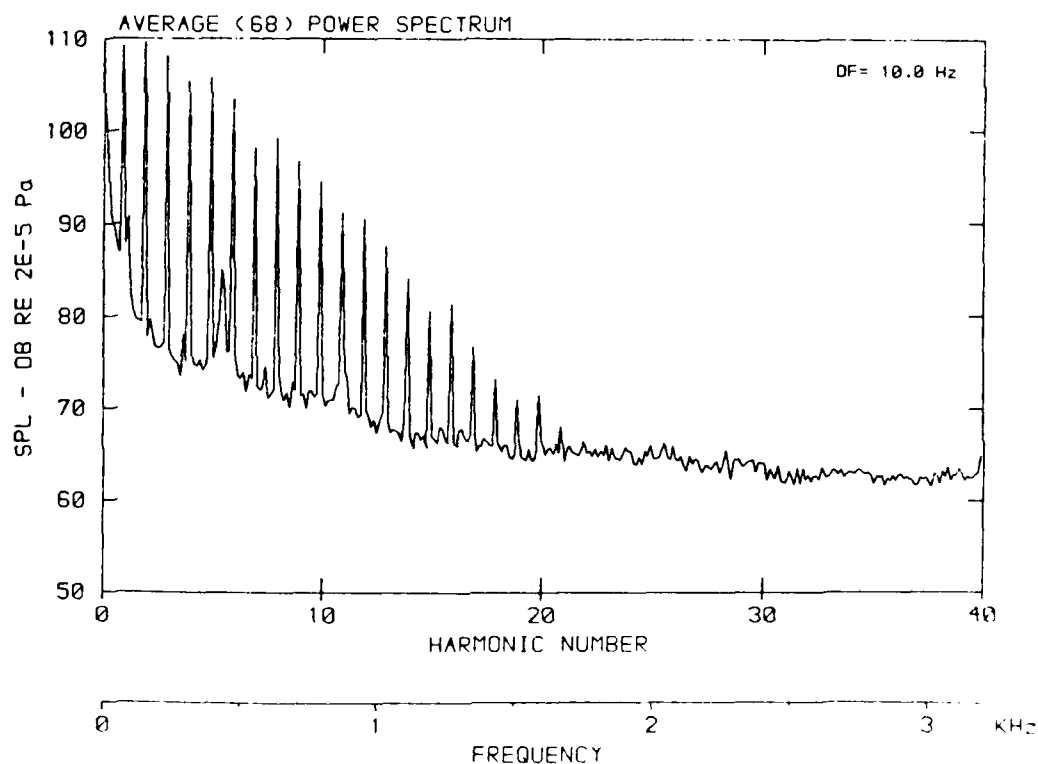
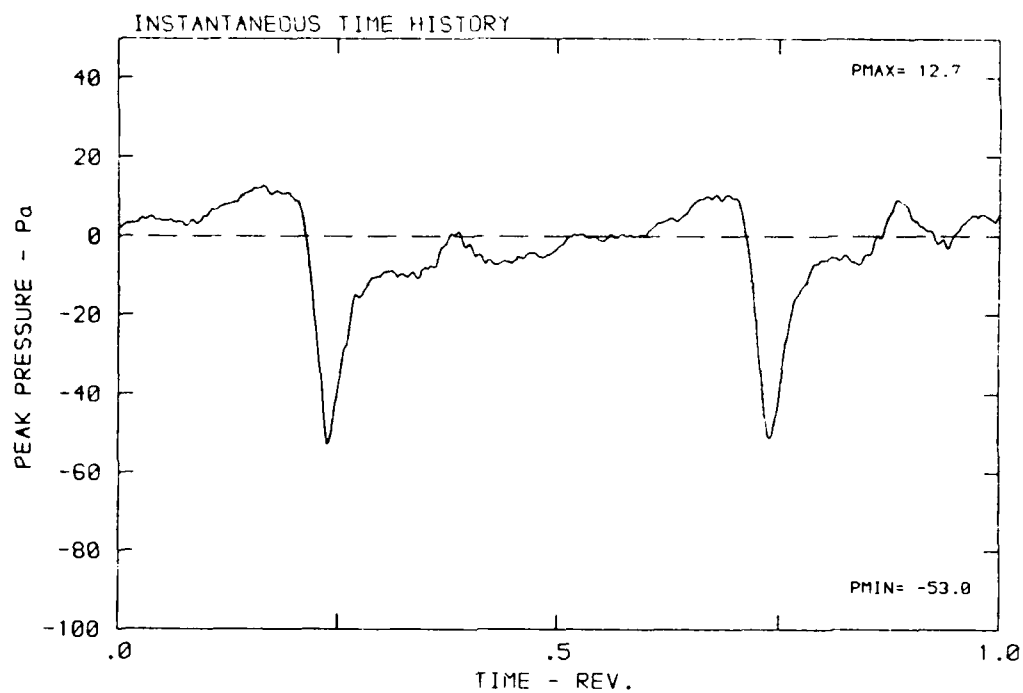
DATA POINT: LC-2 RUN: 140 MP: 2

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 286.6 K



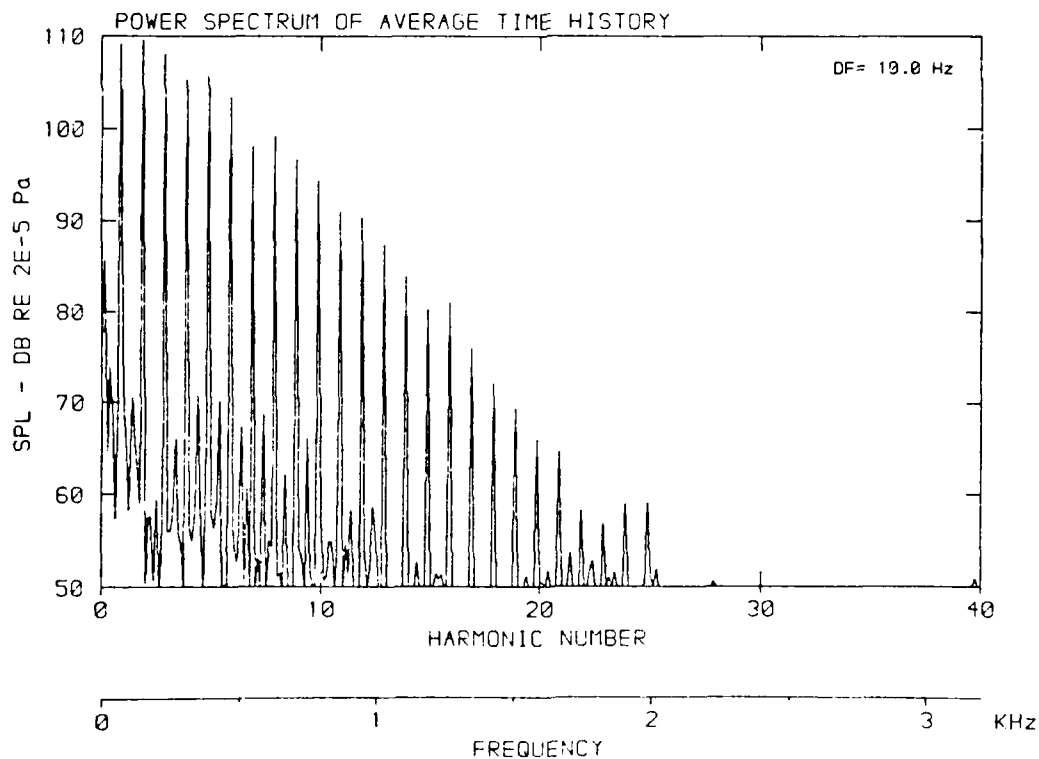
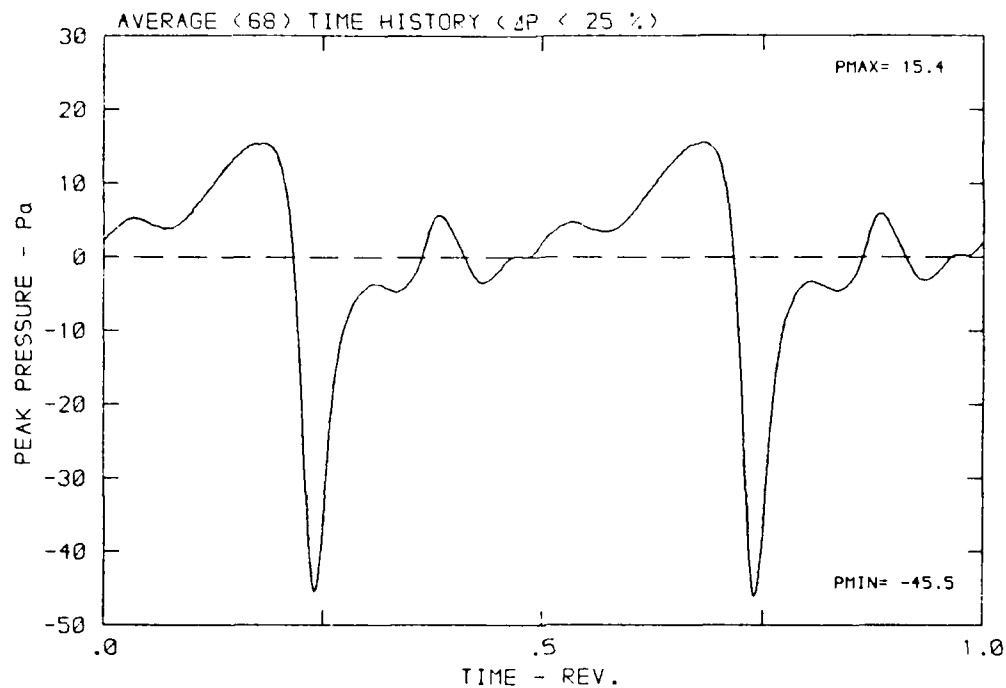
DATA POINT: LC-2 RUN: 140 MP: 3

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 256.6 s



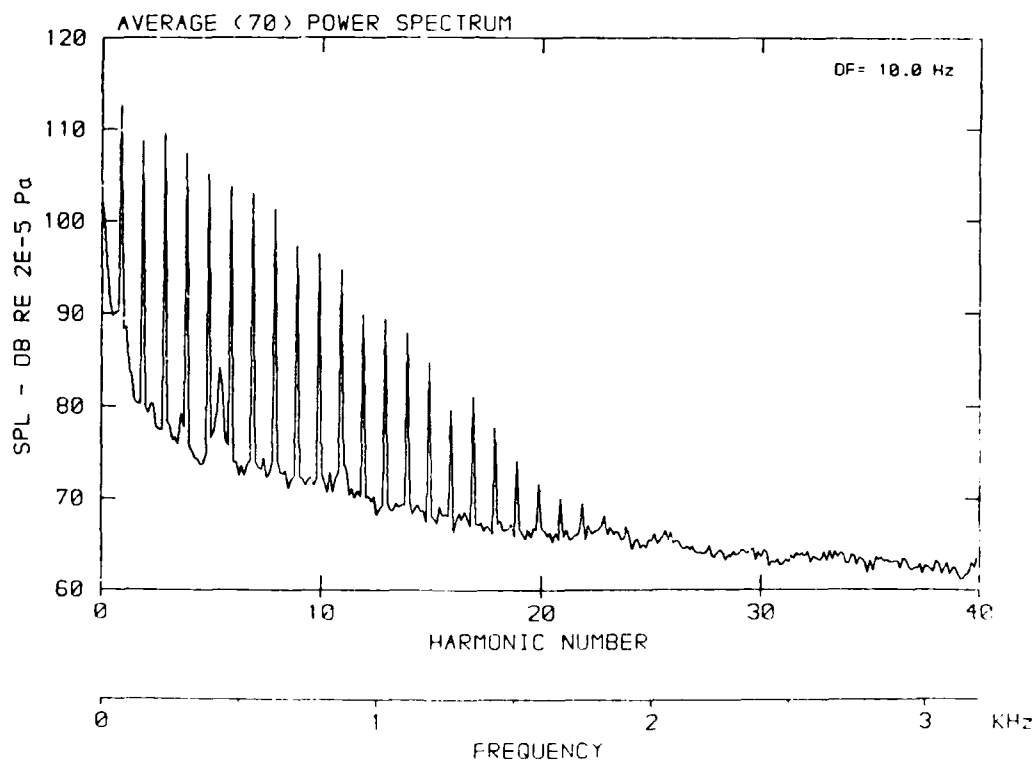
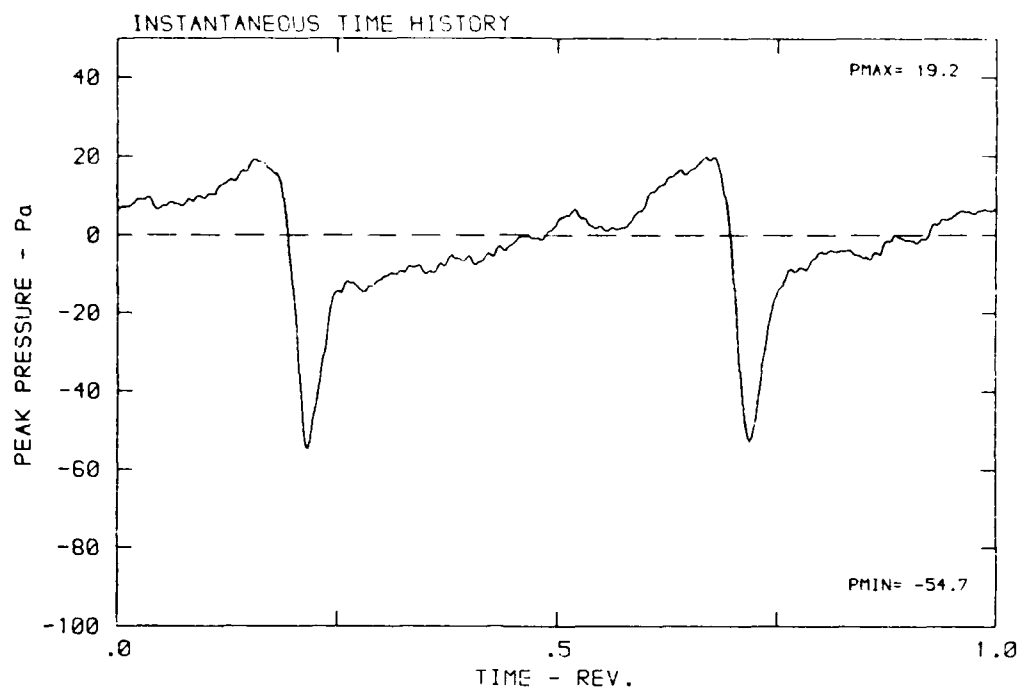
DATA POINT: LC-2 RUN: 140 MP: 3

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 286.6 K



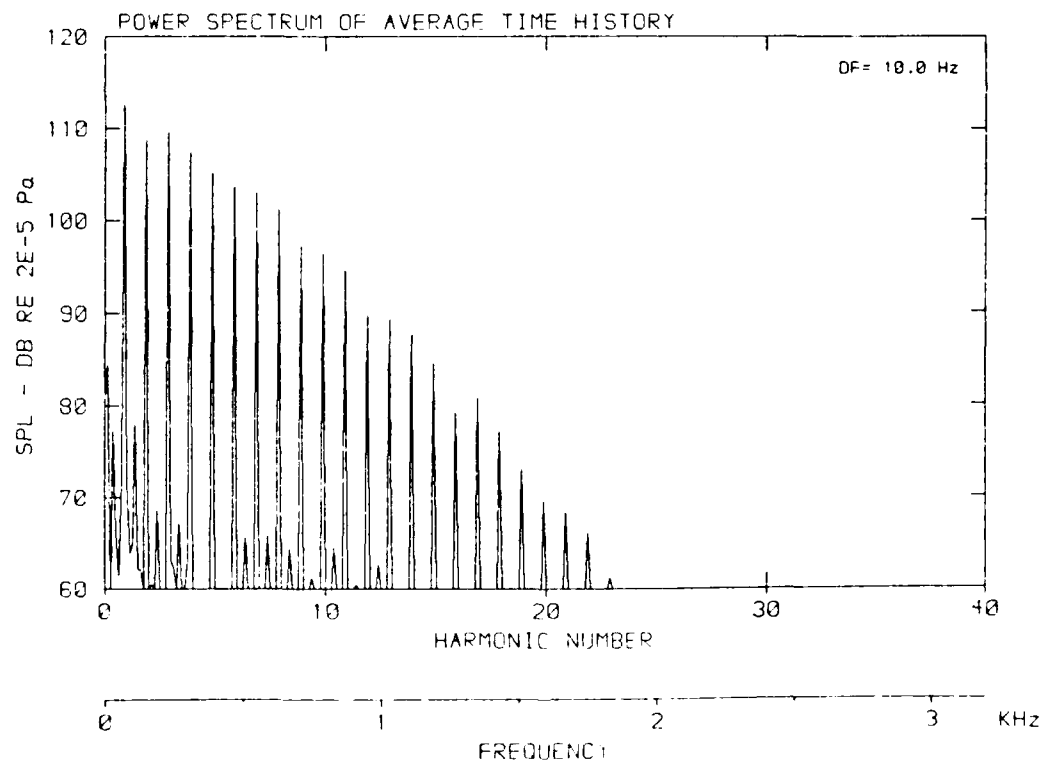
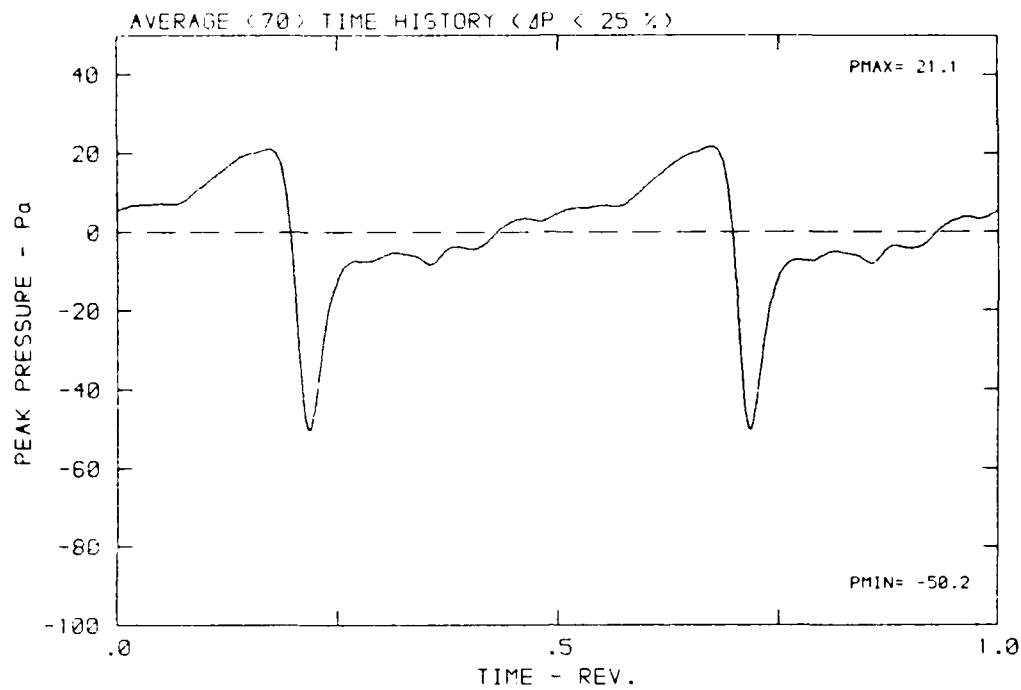
DATA POINT: LC-2 RUN: 140 MP: 4

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 285.6 °



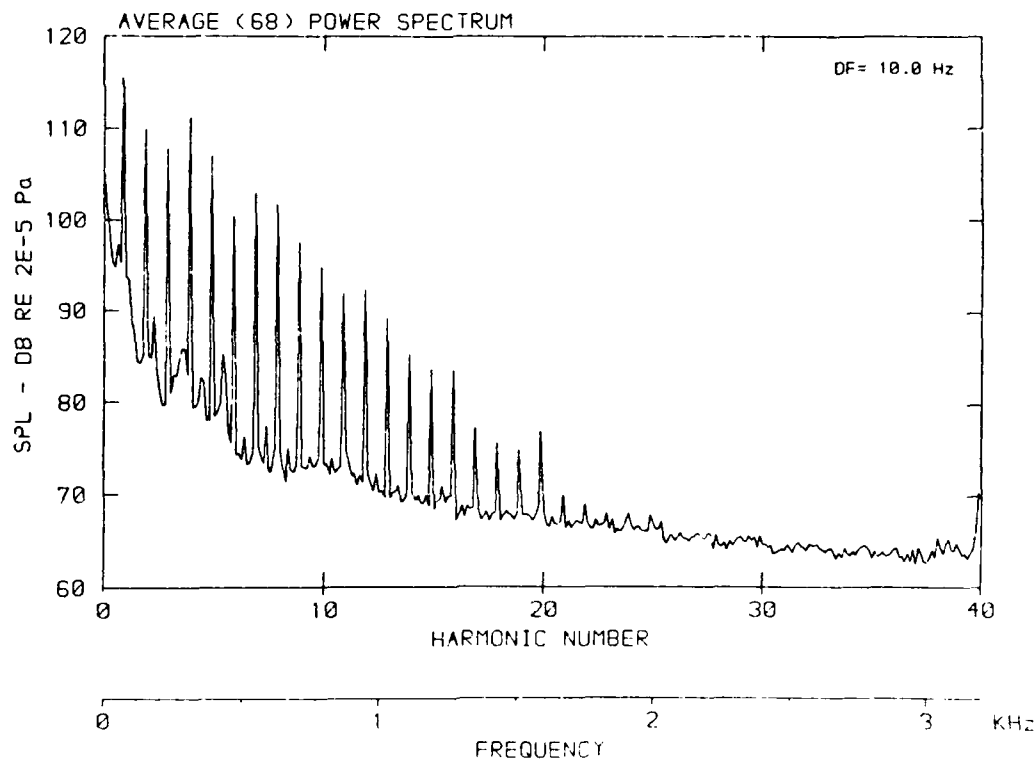
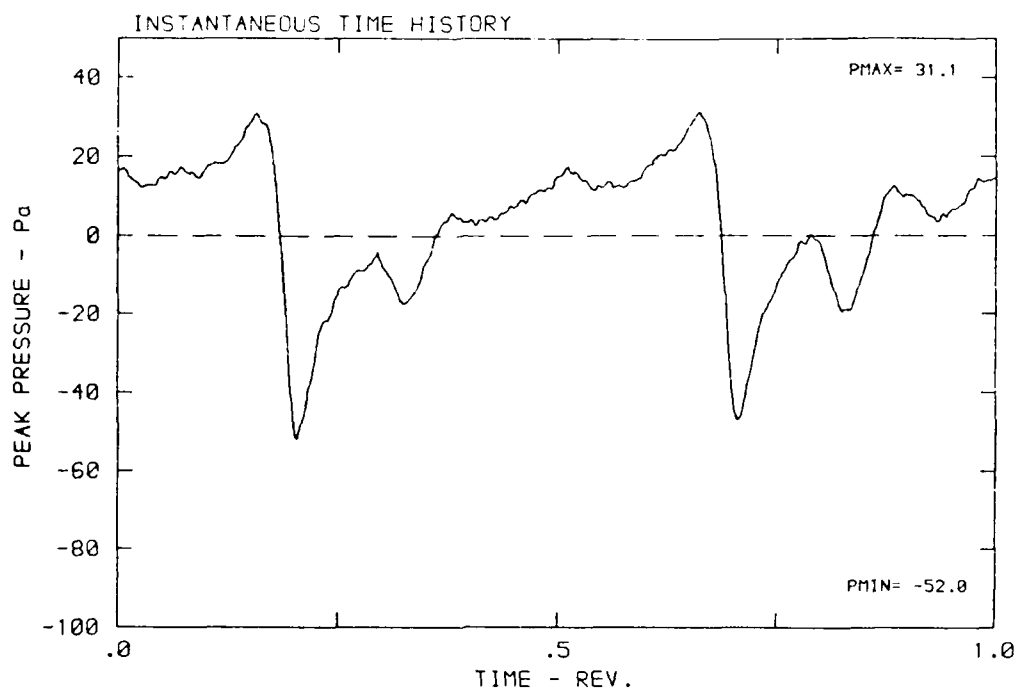
DATA POINT: LC-2 RUN: 140 MP: 4

β : 20.7° NH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 286.6 K



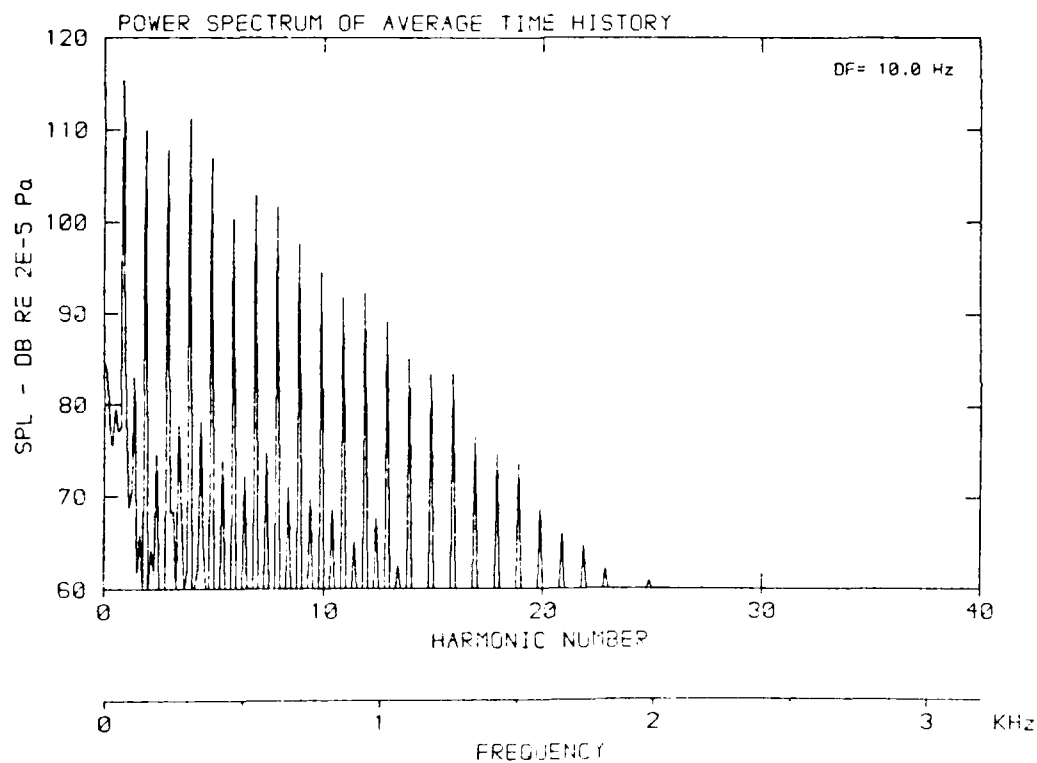
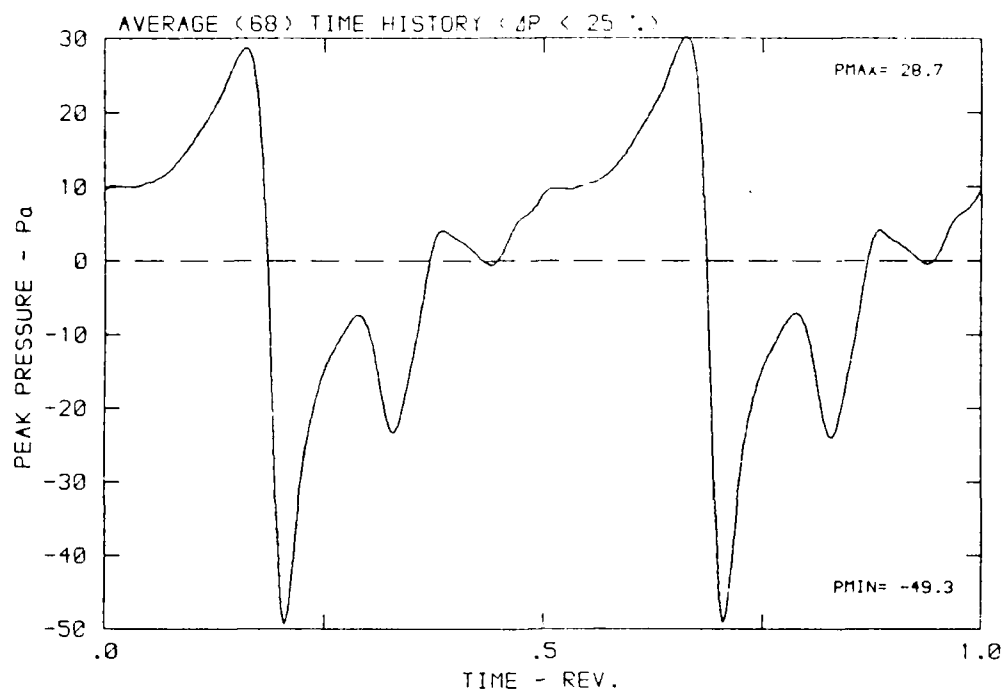
DATA POINT: LC-2 RUN: 140 MP: 5

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 255.0



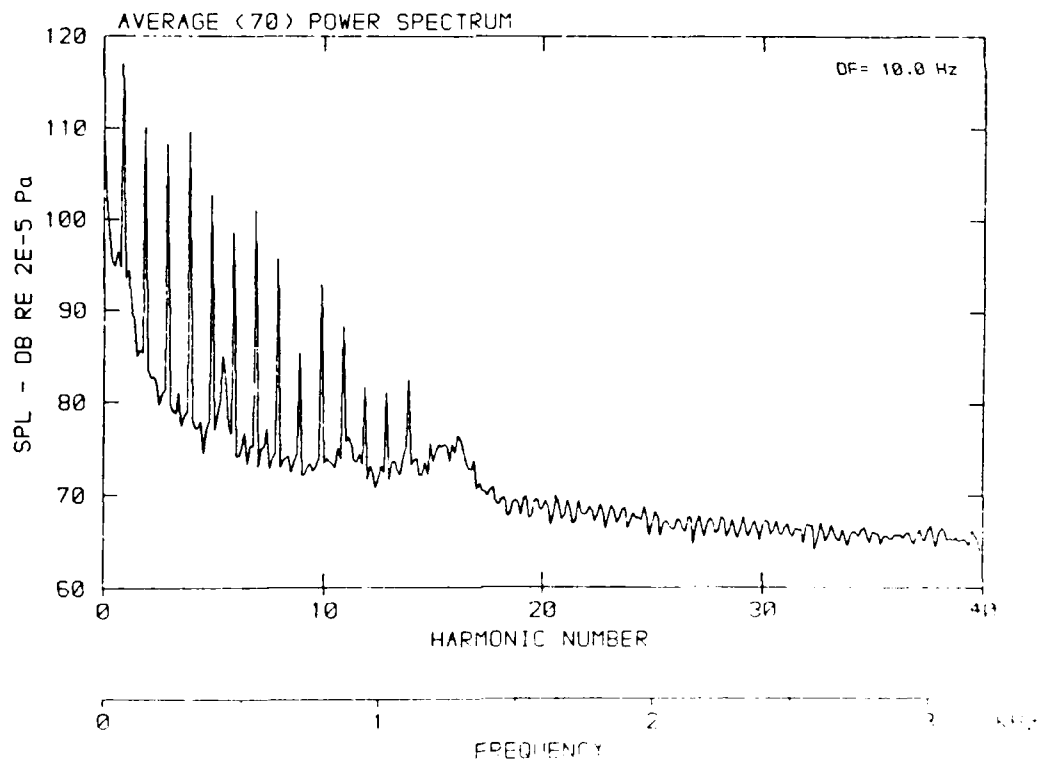
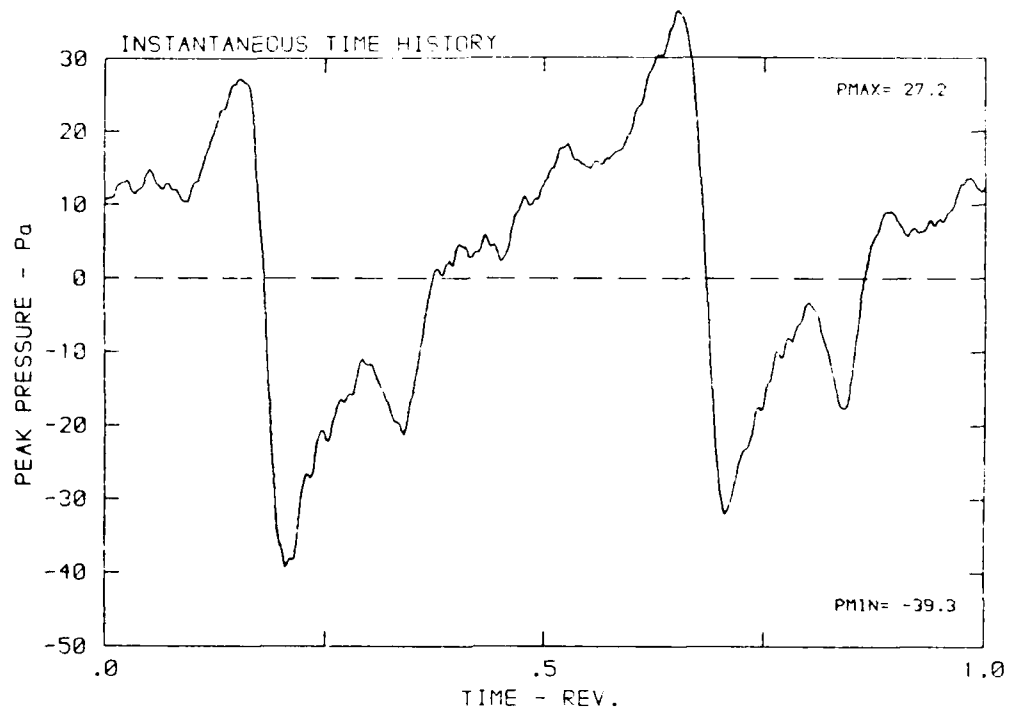
DATA POINT: LC-2 RUN: 140 MP: 5

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 286.6 K



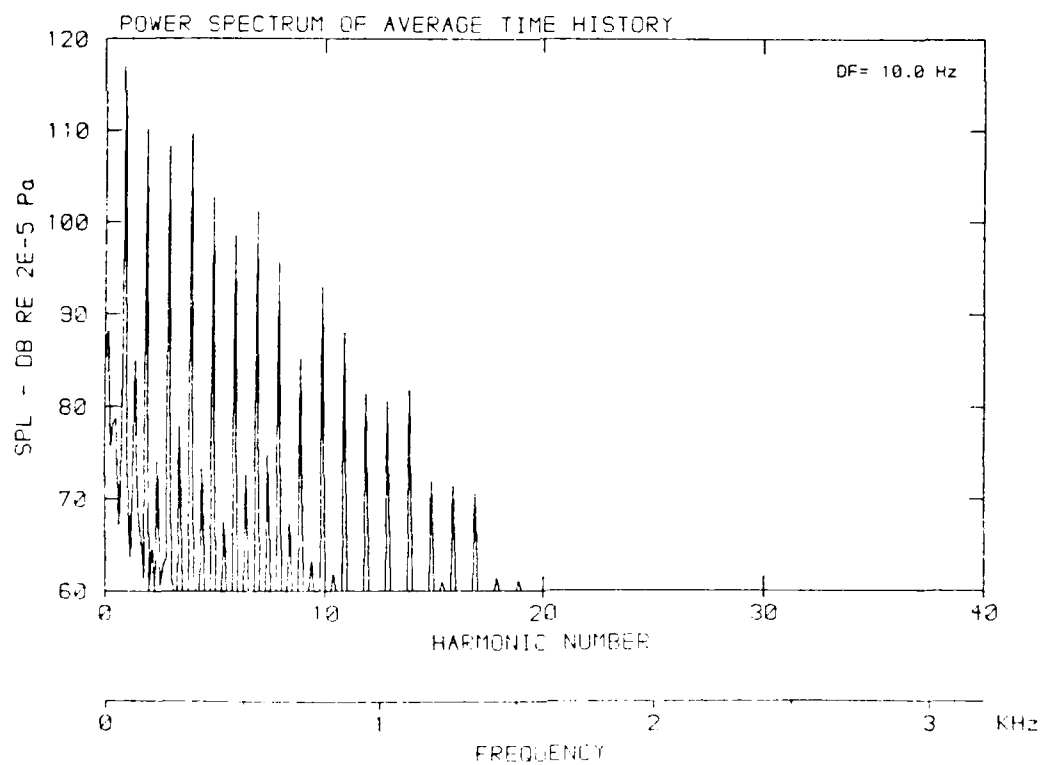
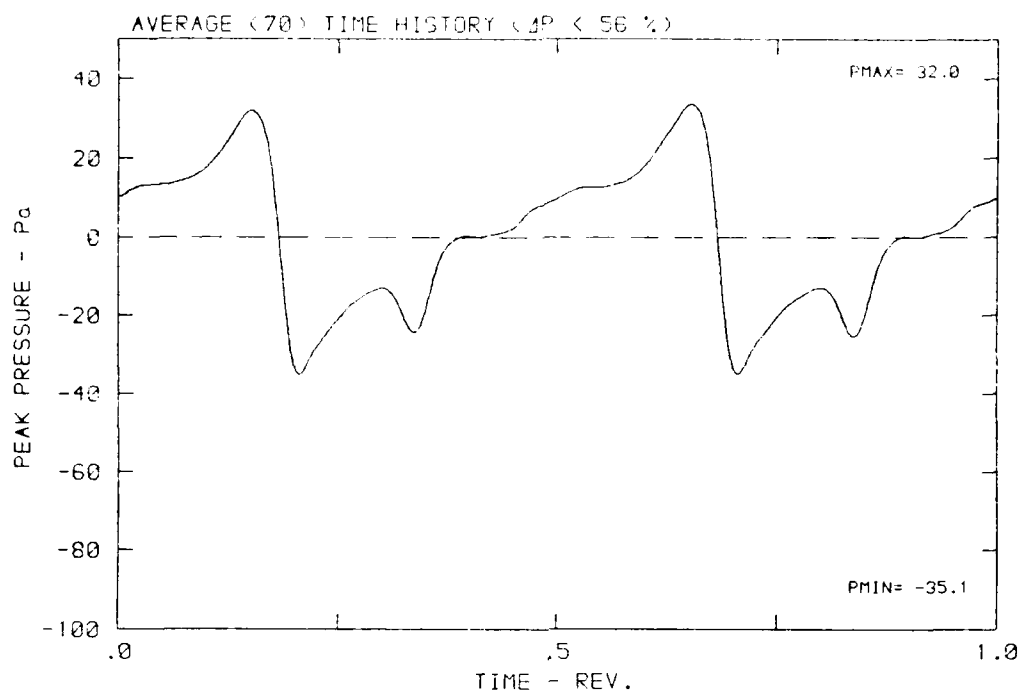
DATA POINT: LC-2 RUN: 140 MP: 6

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 245.4



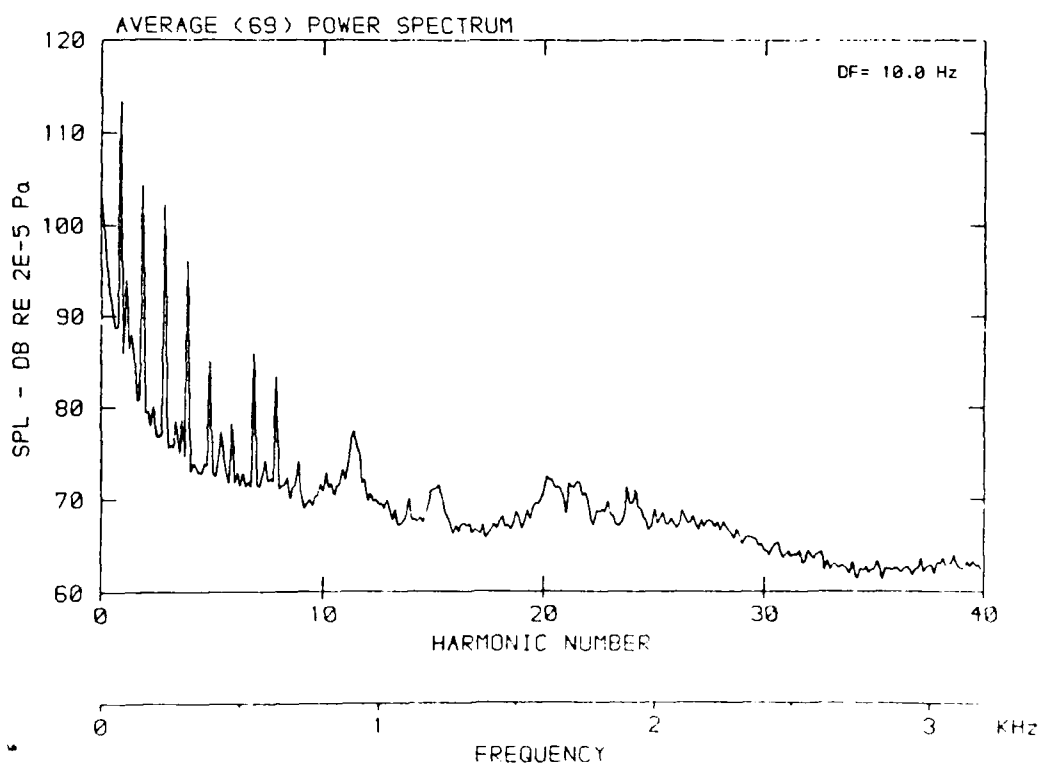
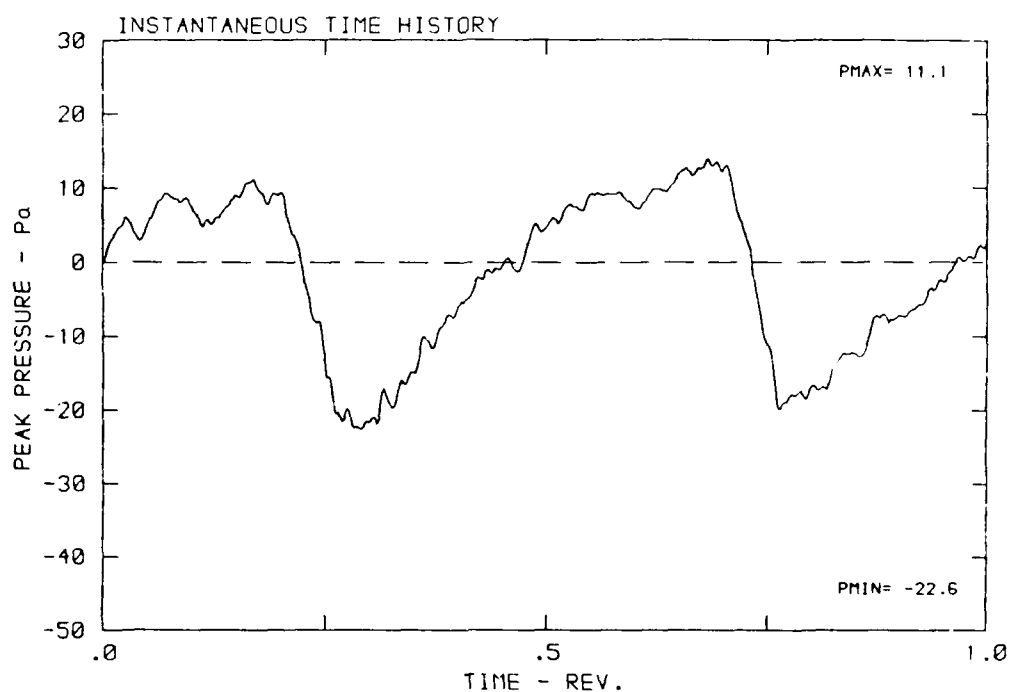
DATA POINT: LC-2 RUN: 140 MP: 6

β : 20.7° MH: .7675 n: 2400 rpm ν/ω : .202 ϕ : -3.8° T: 286.6 K



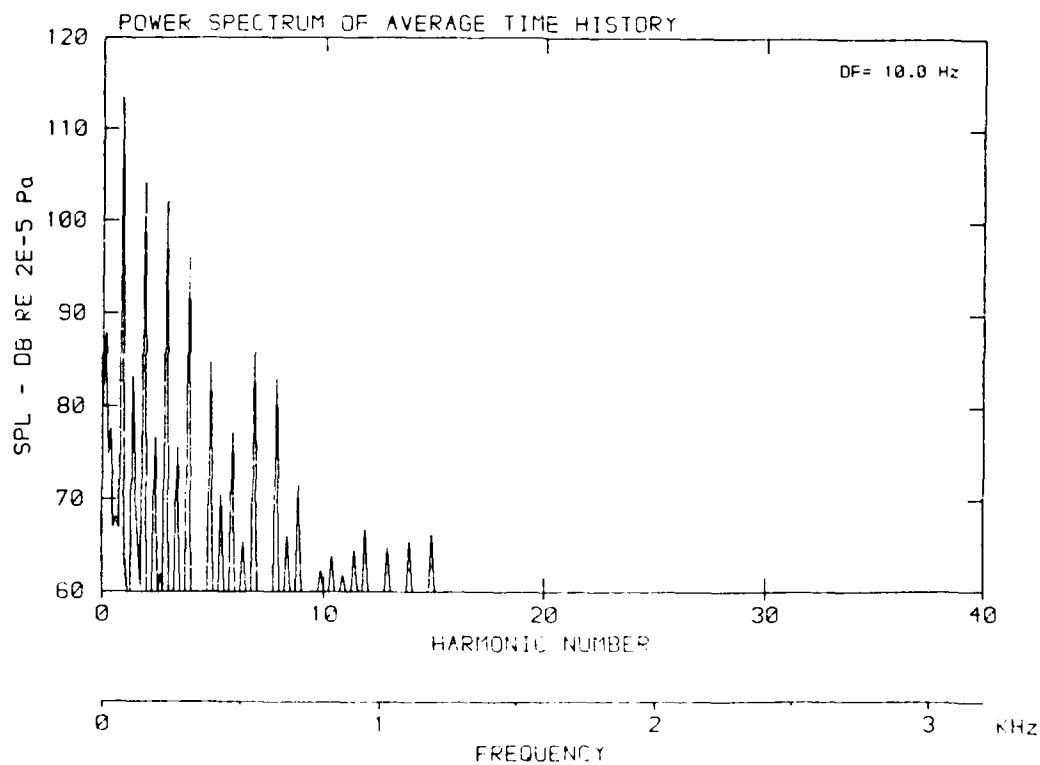
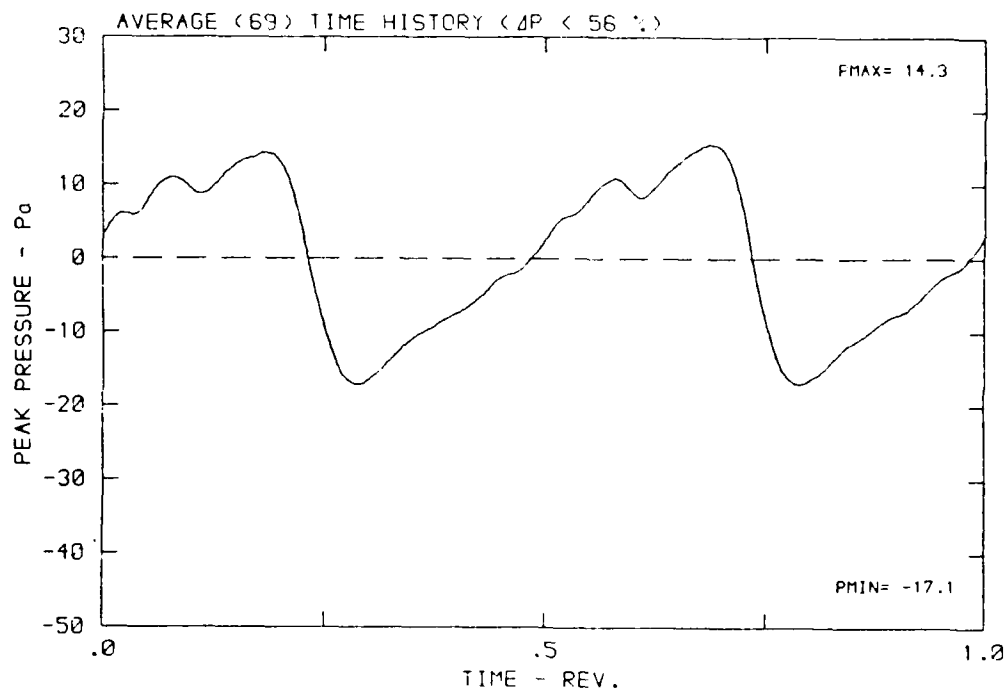
DATA POINT: LC-2 RUN: 140 MP: 7

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 235.6



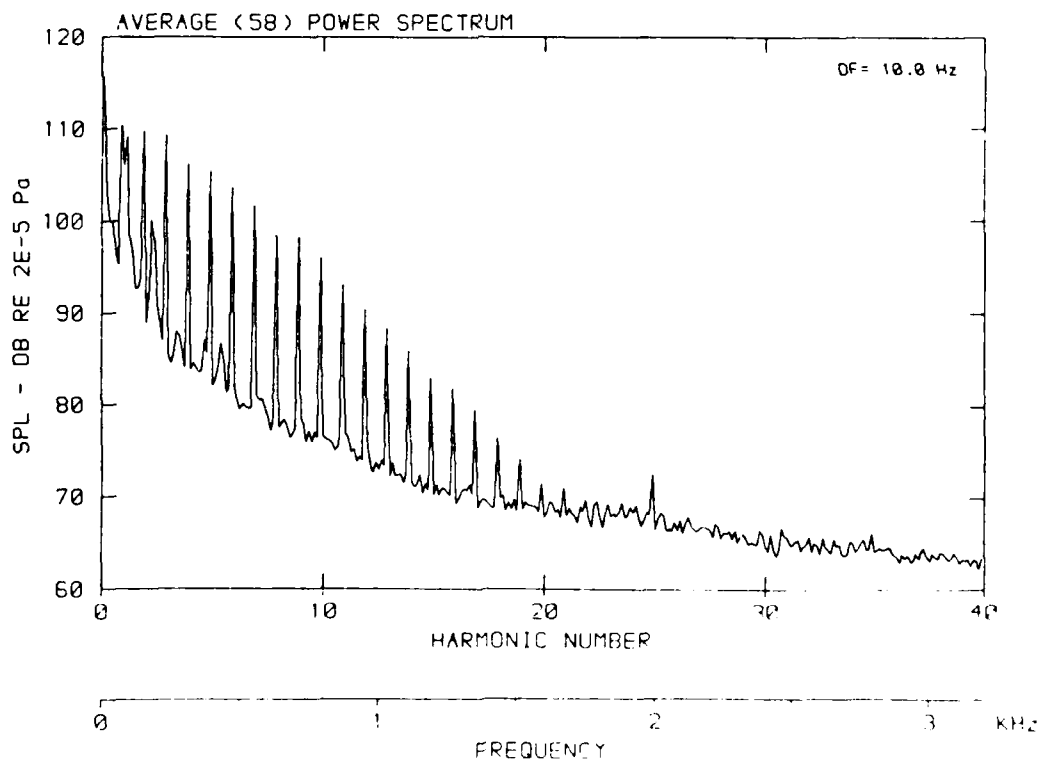
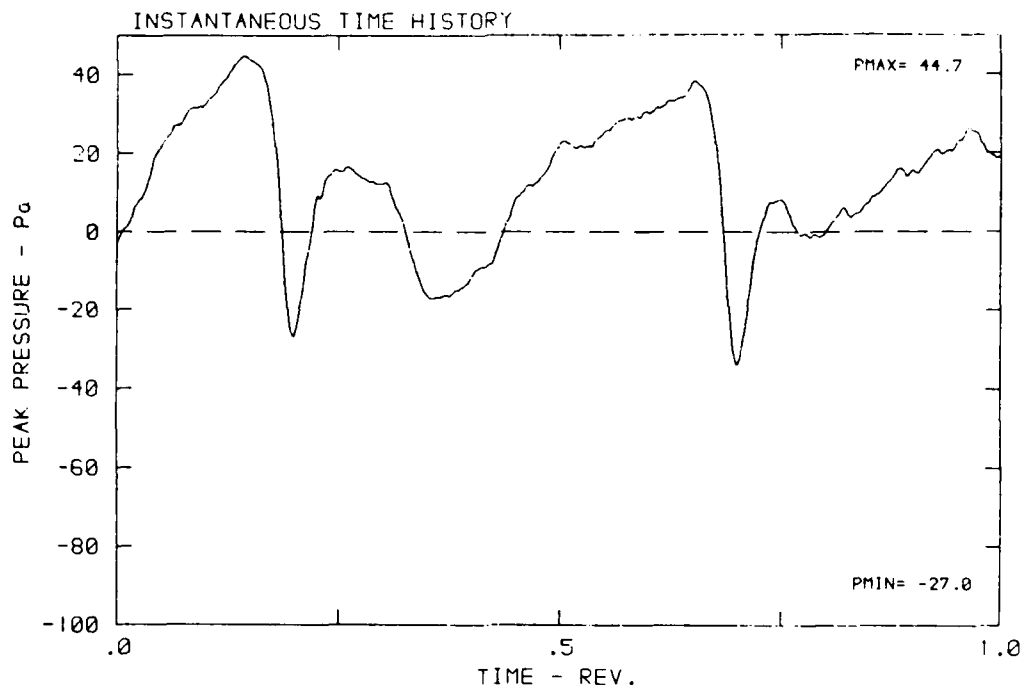
DATA POINT: LC-2 RUN: 140 MP: 7

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 286.6 K



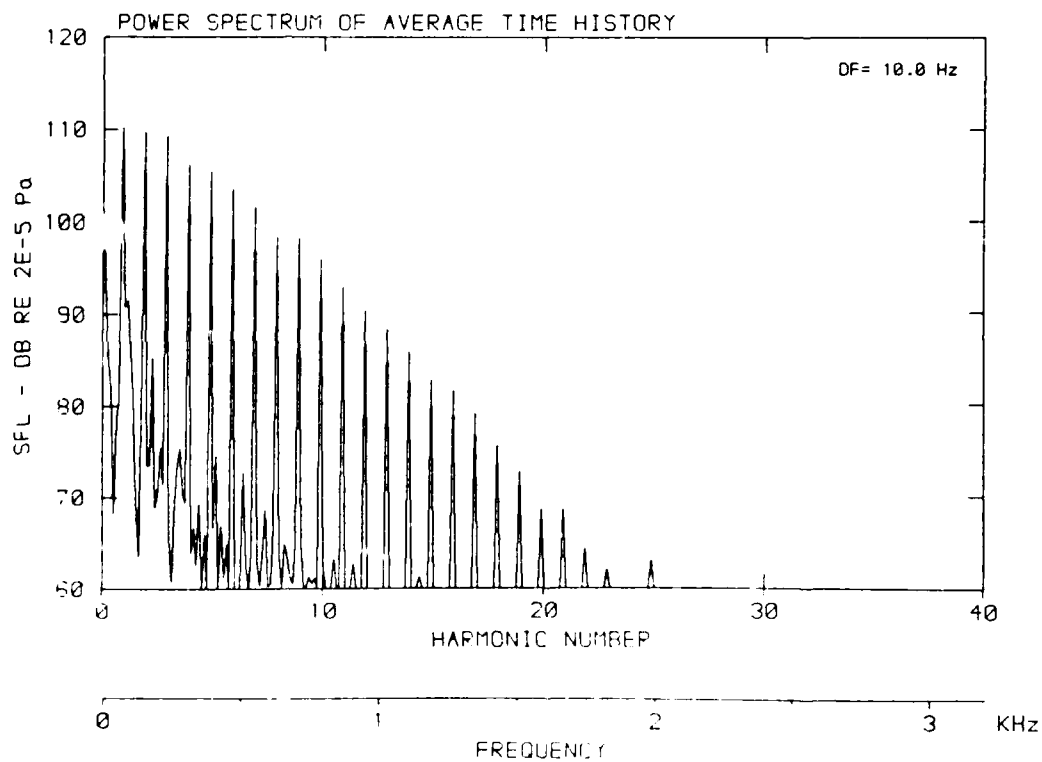
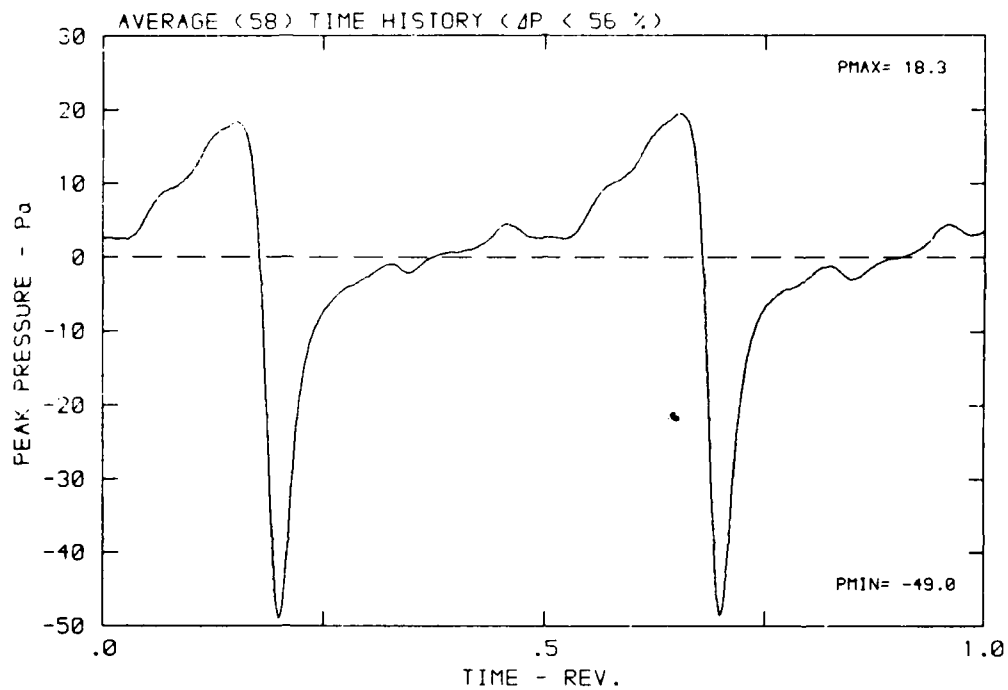
DATA POINT: LC-2 RUN: 140 MP: 8

β : 20.7° MH: .7675 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 286.6 K



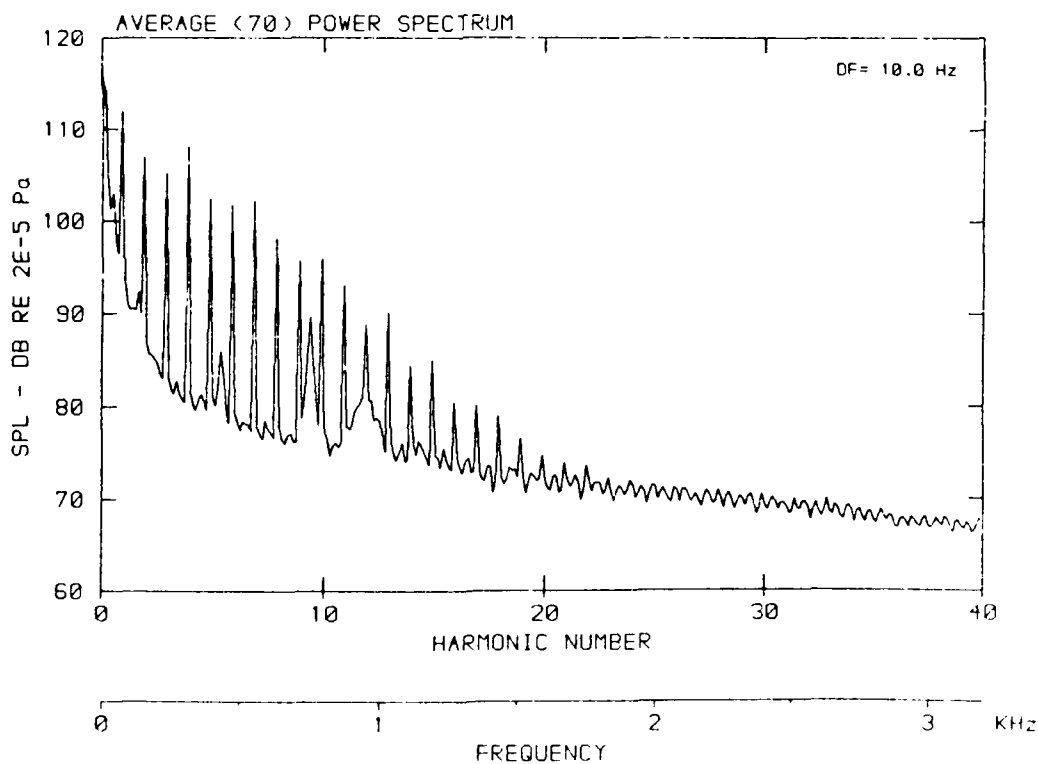
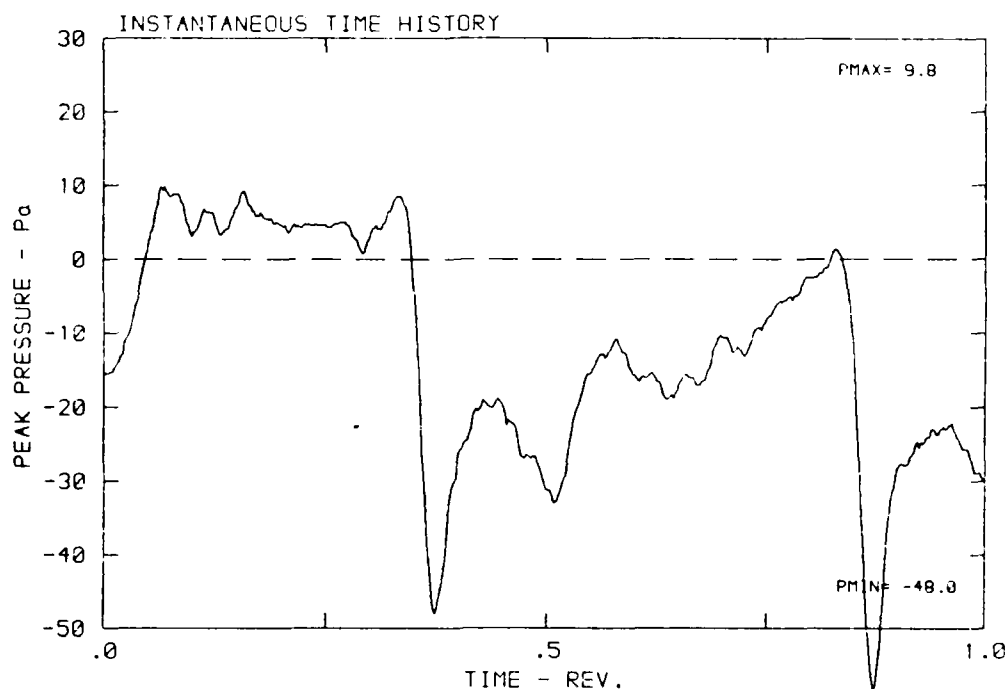
DATA POINT: LC-2 RUN: 140 MP: 8

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 286.6 K



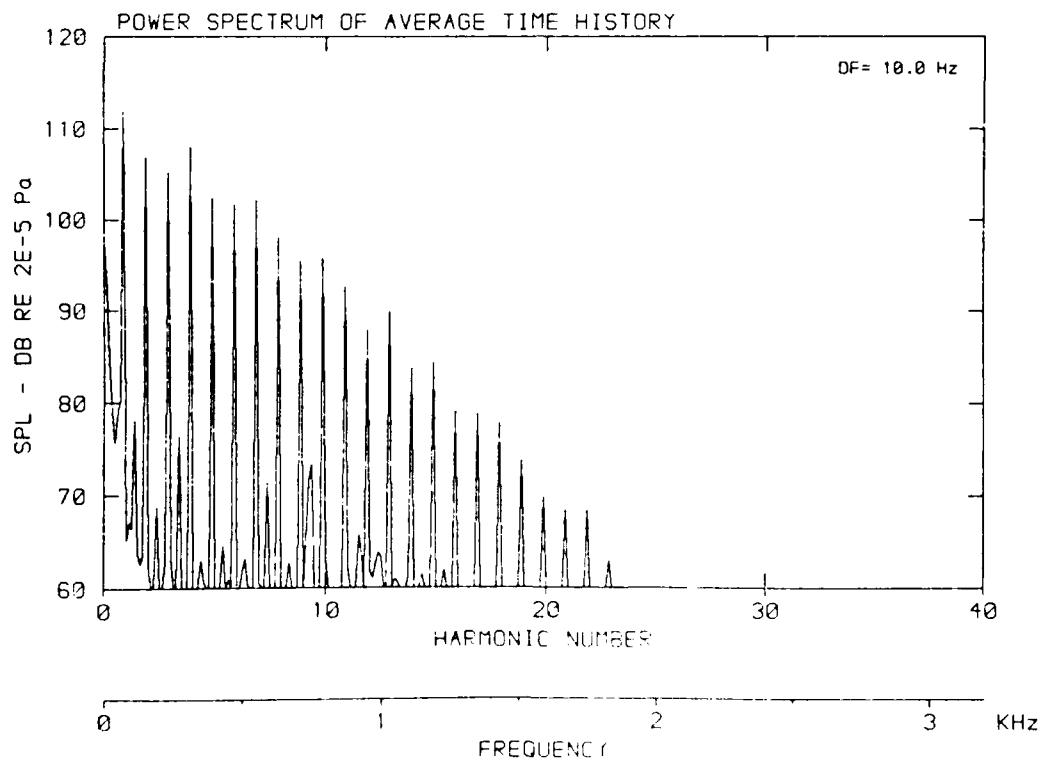
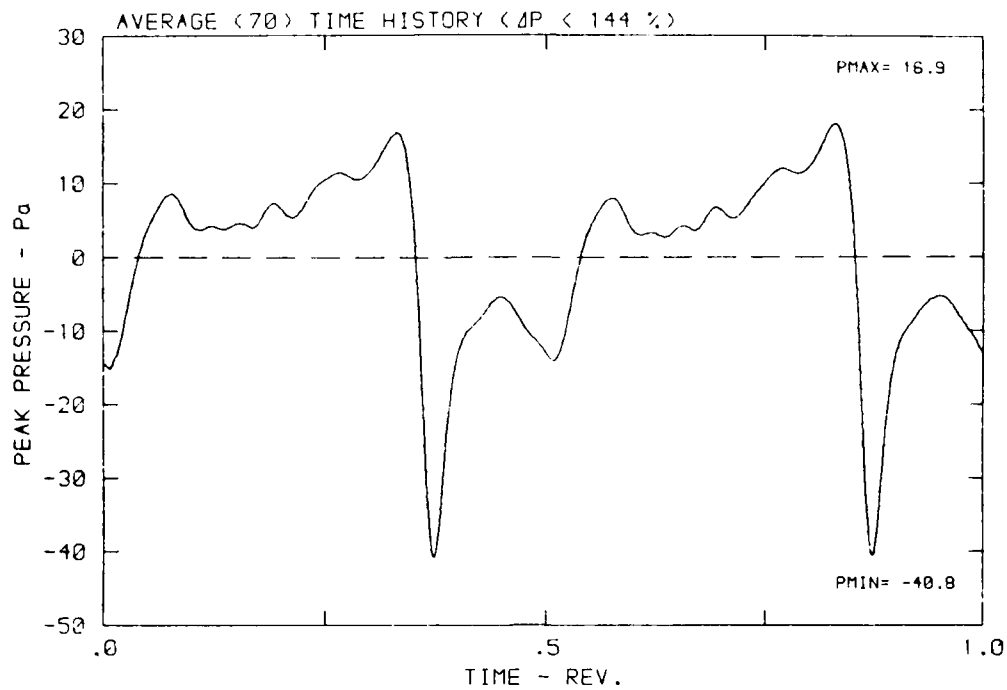
DATA POINT: LC-2 RUN: 140 MP: 9

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ψ : -3.6° T: 286.6



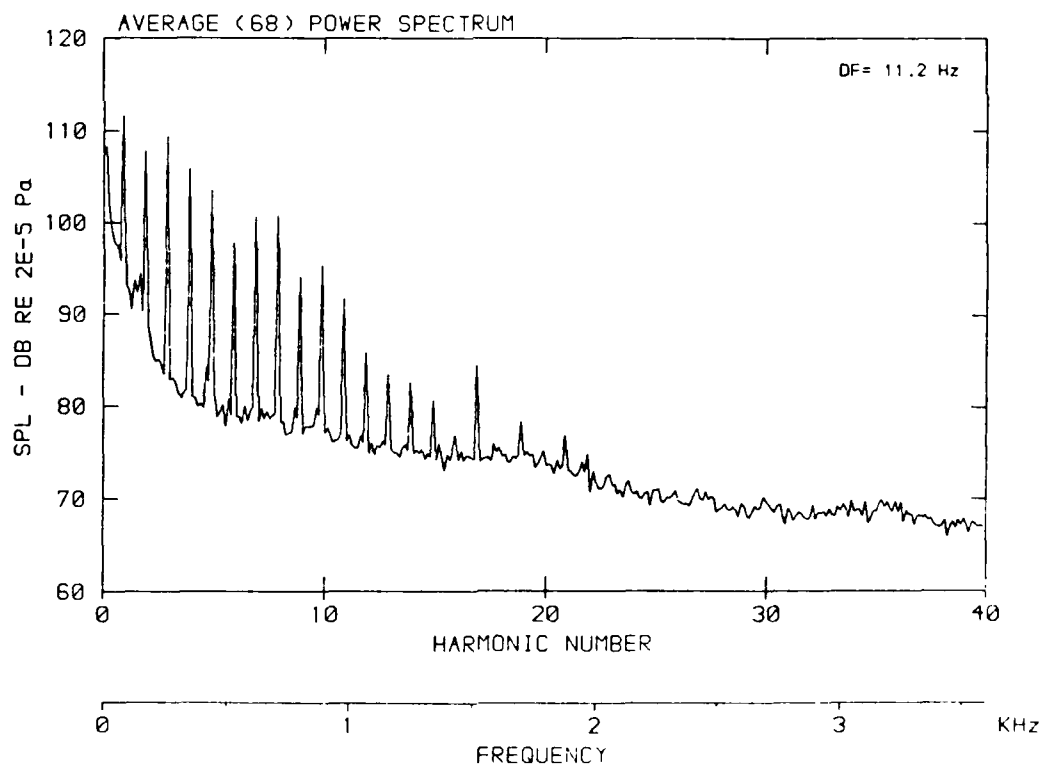
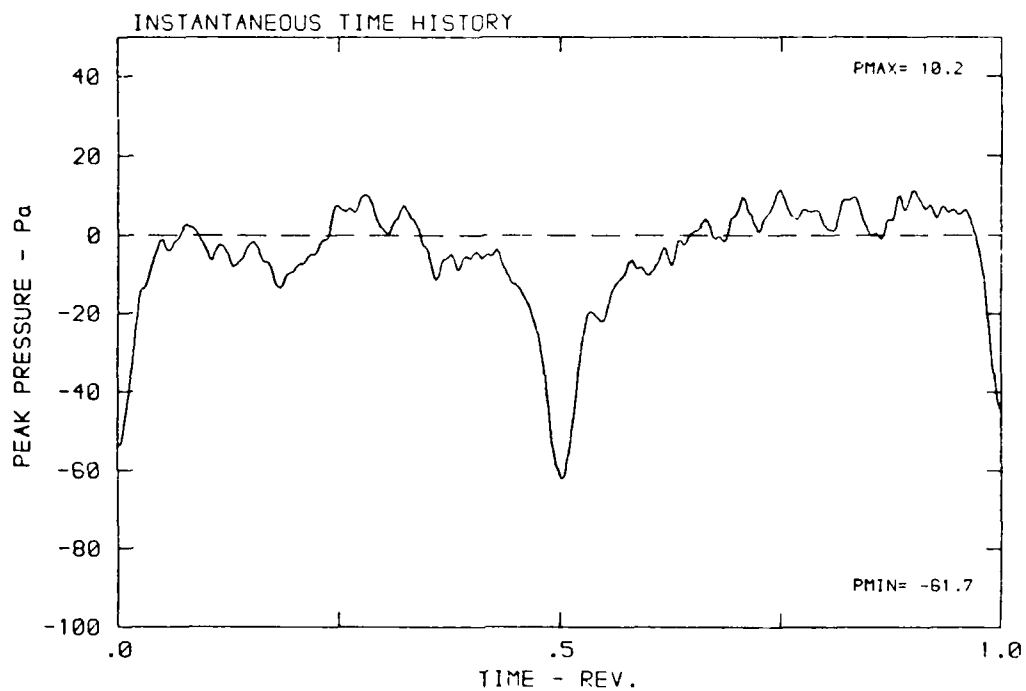
DATA POINT: LC-2 RUN: 140 MP: 9

β : 20.7° MH: .7675 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 286.6 K



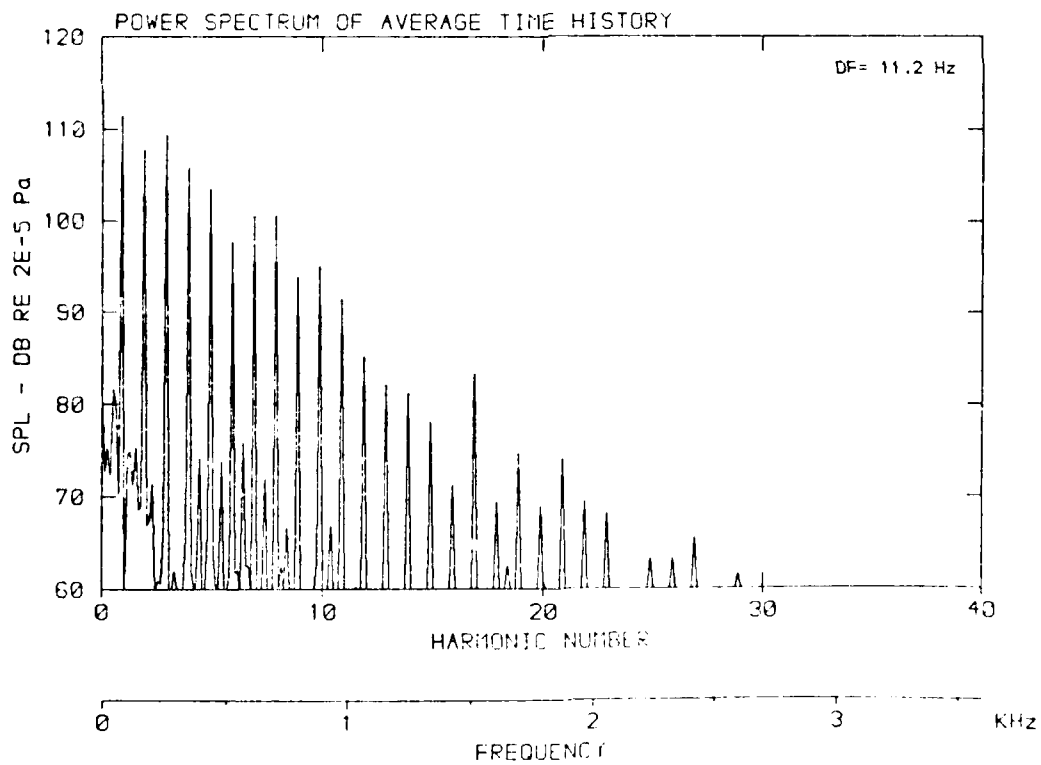
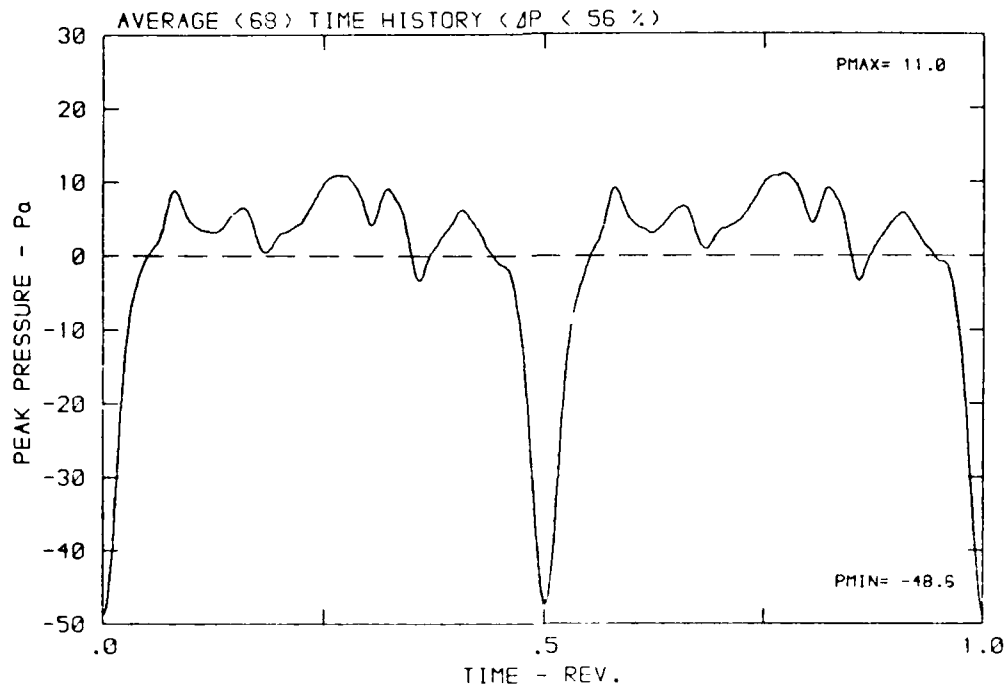
DATA POINT: LC-3 RUN: 141 MP: 1

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 297.7 K



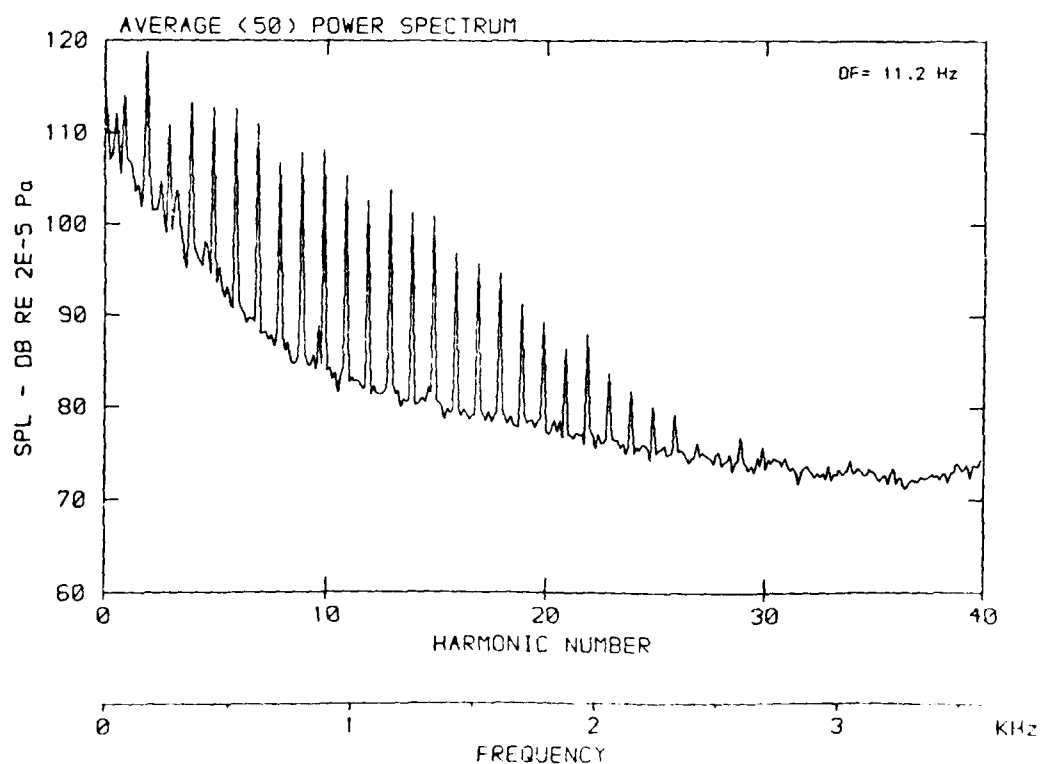
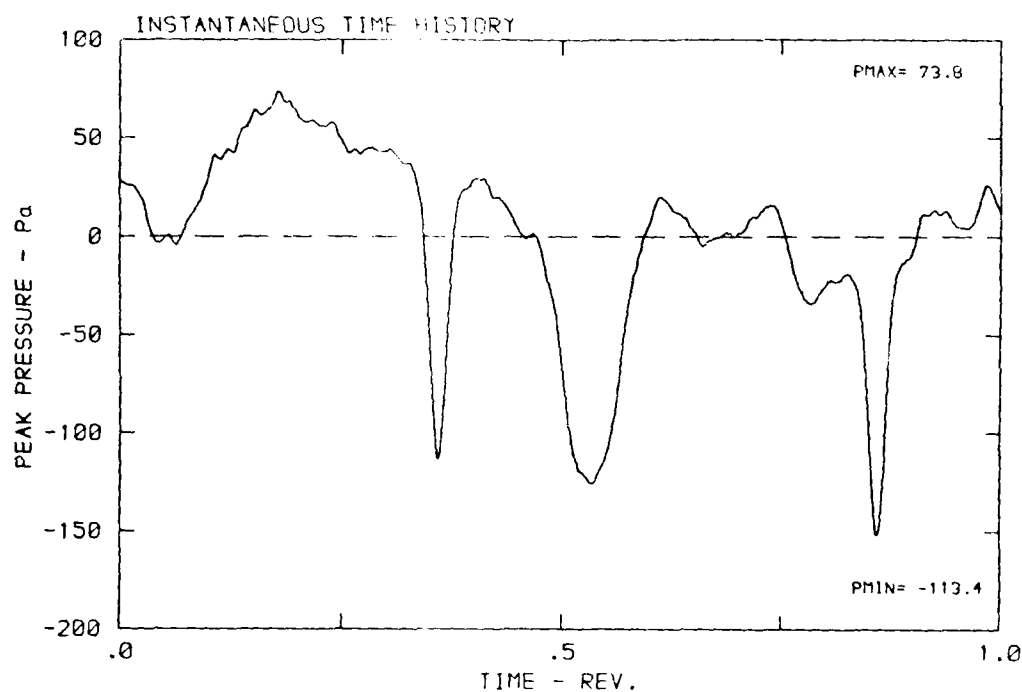
DATA POINT: LC-3 RUN: 141 MP: 1

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



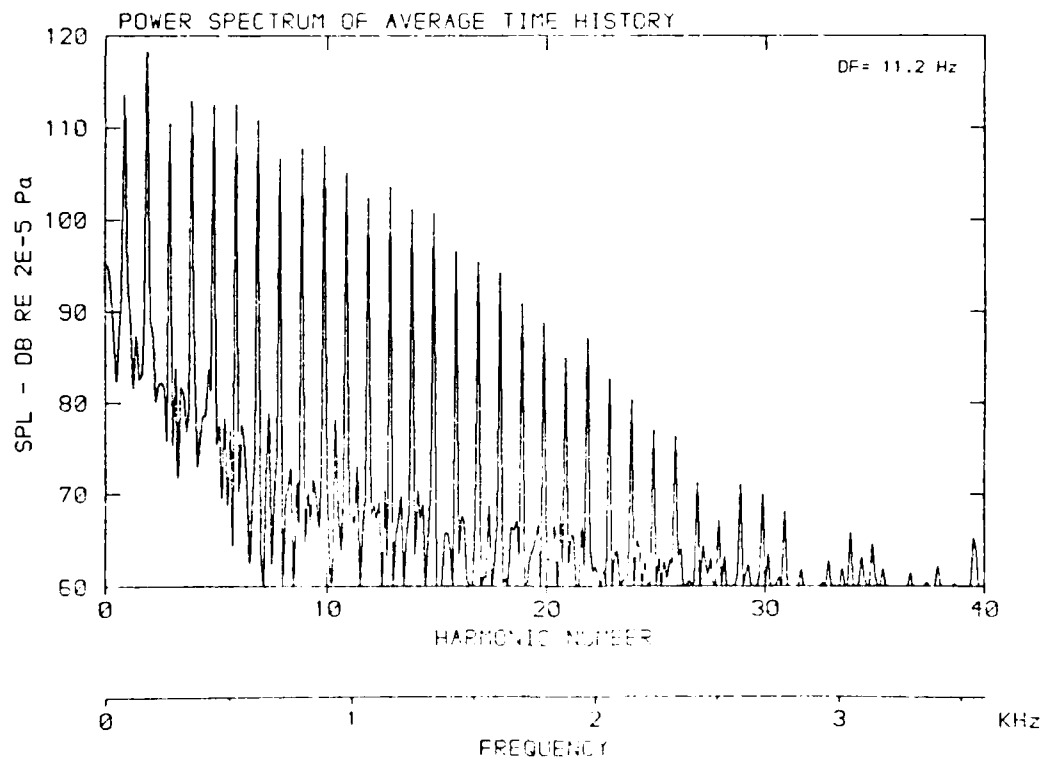
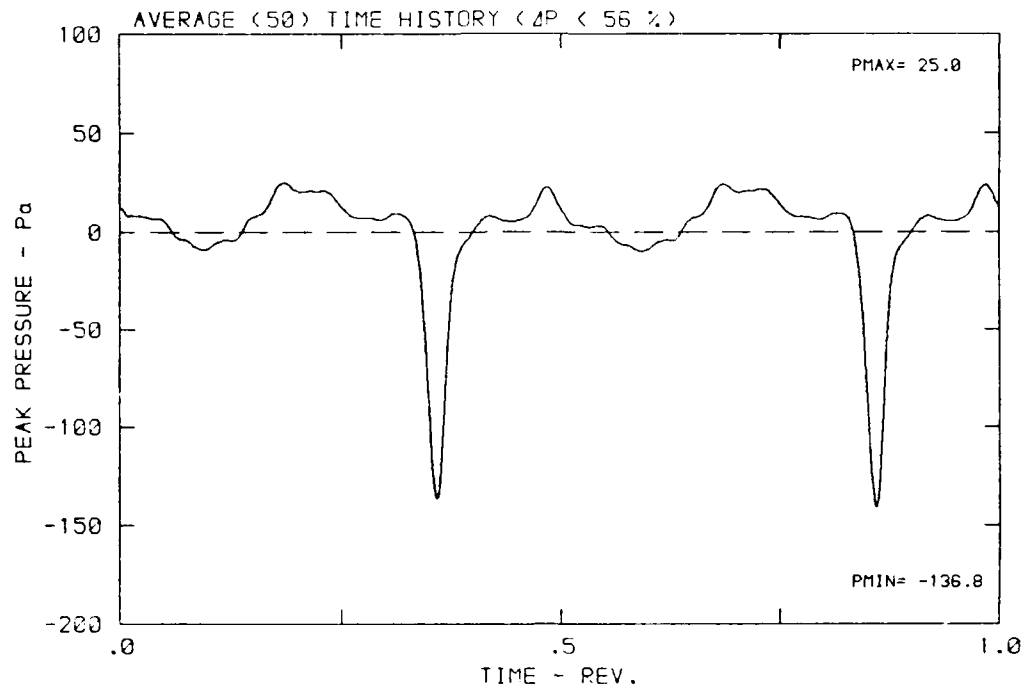
DATA POINT: LC-3 RUN: 141 MP: 2

β : 20.7° MH: .8745 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 237.7



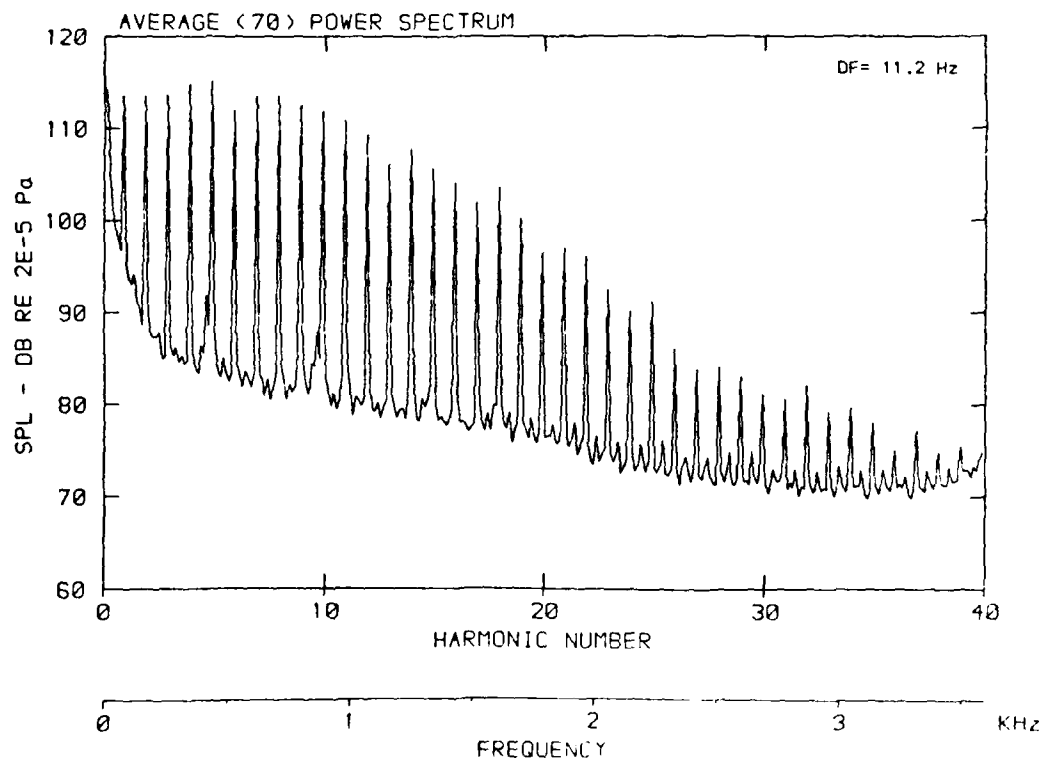
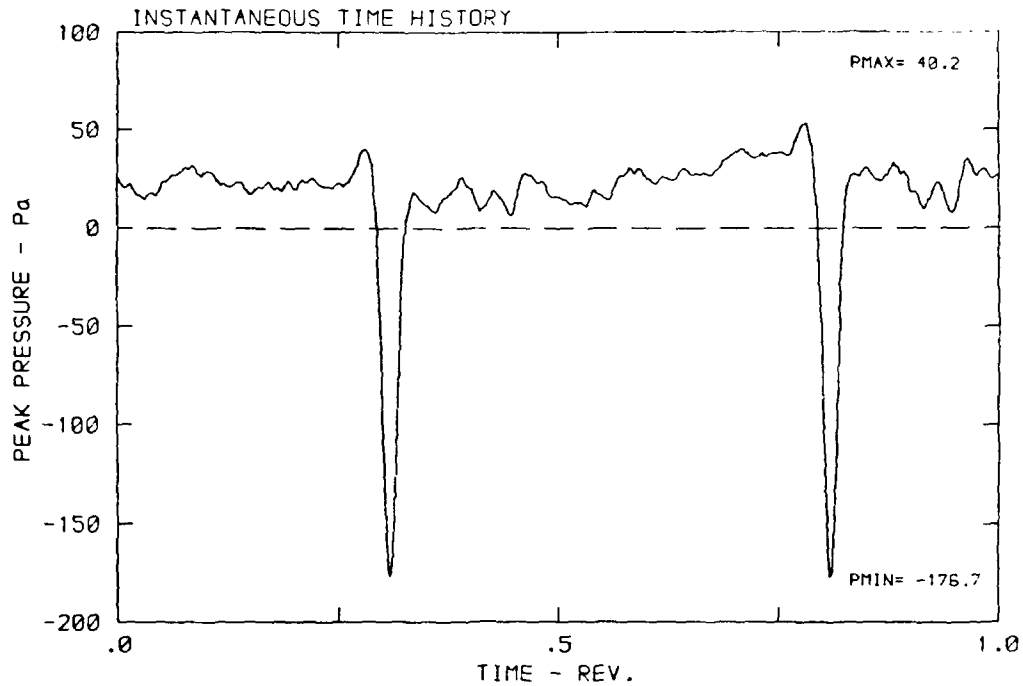
DATA POINT : LC-3 RUN : 141 MP : 2

β : 20.7° MH : .8745 n : 2700 rpm v/u : .268 ϕ : -3.8° T : 287.7 K



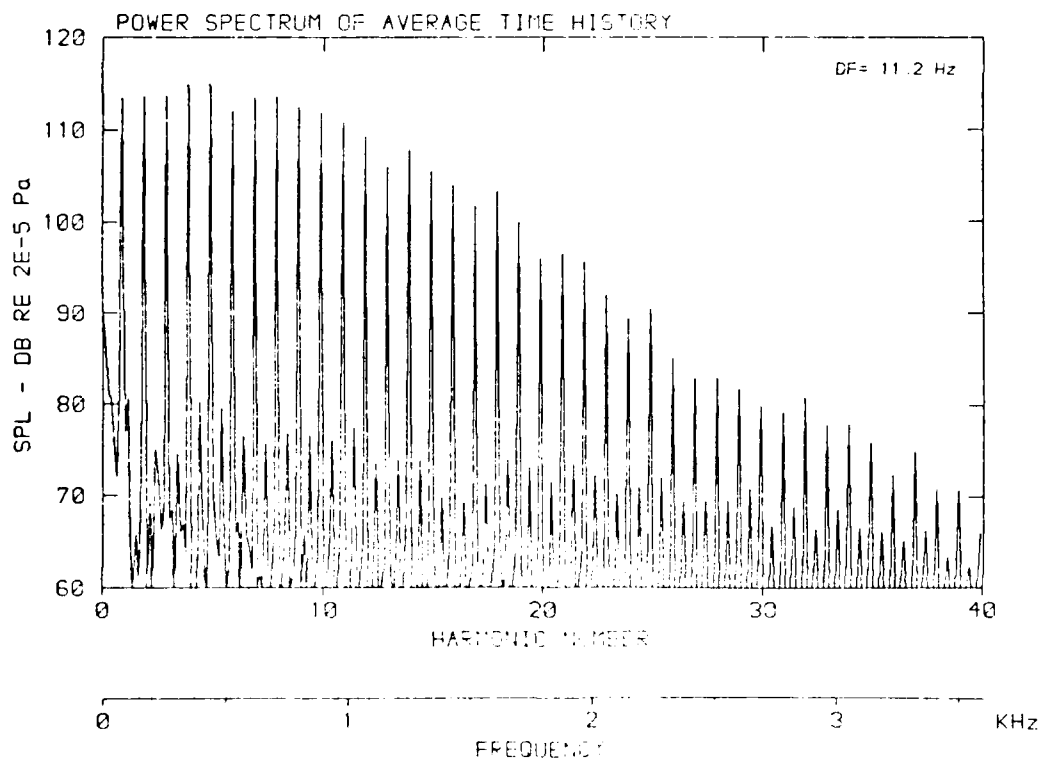
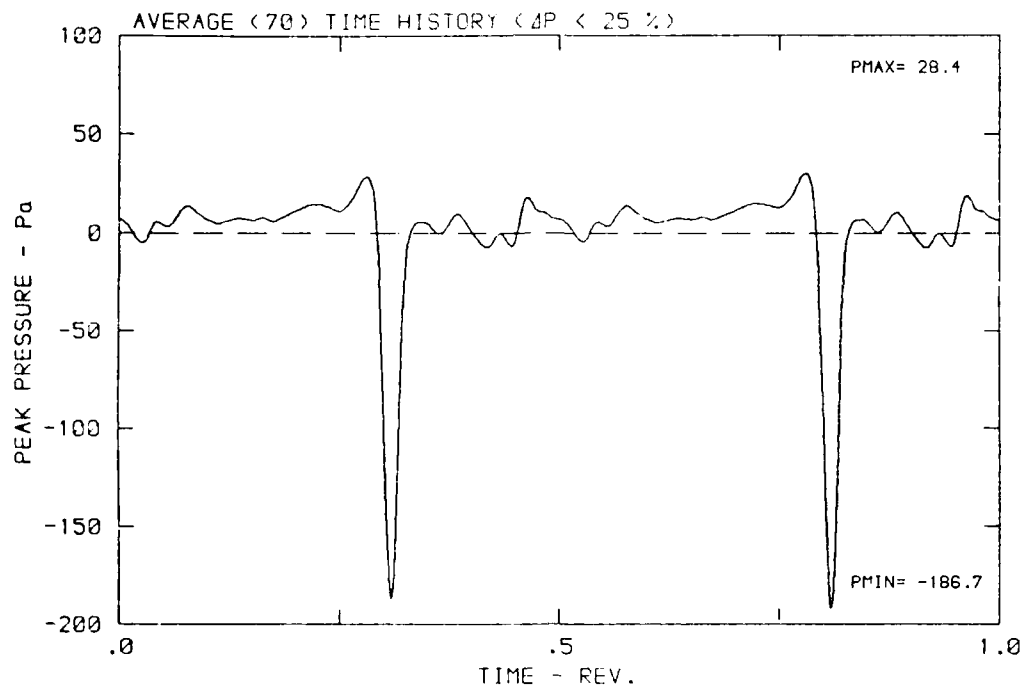
DATA POINT: LC-3 RUN: 141 MP: 3

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 257.7



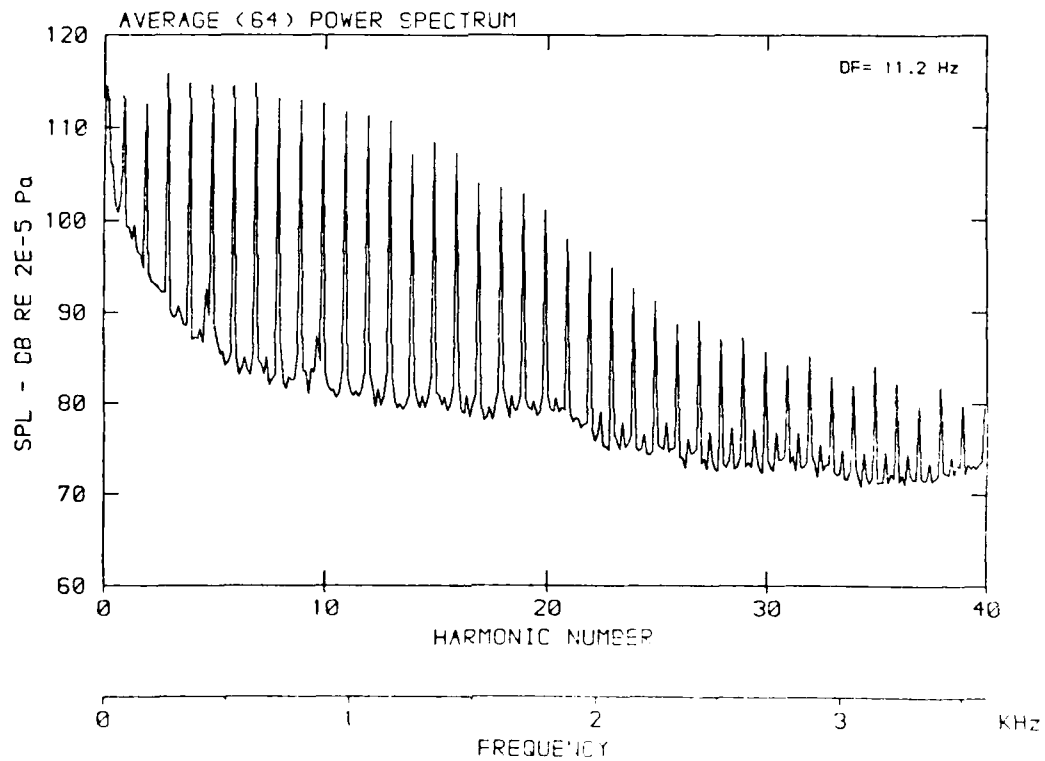
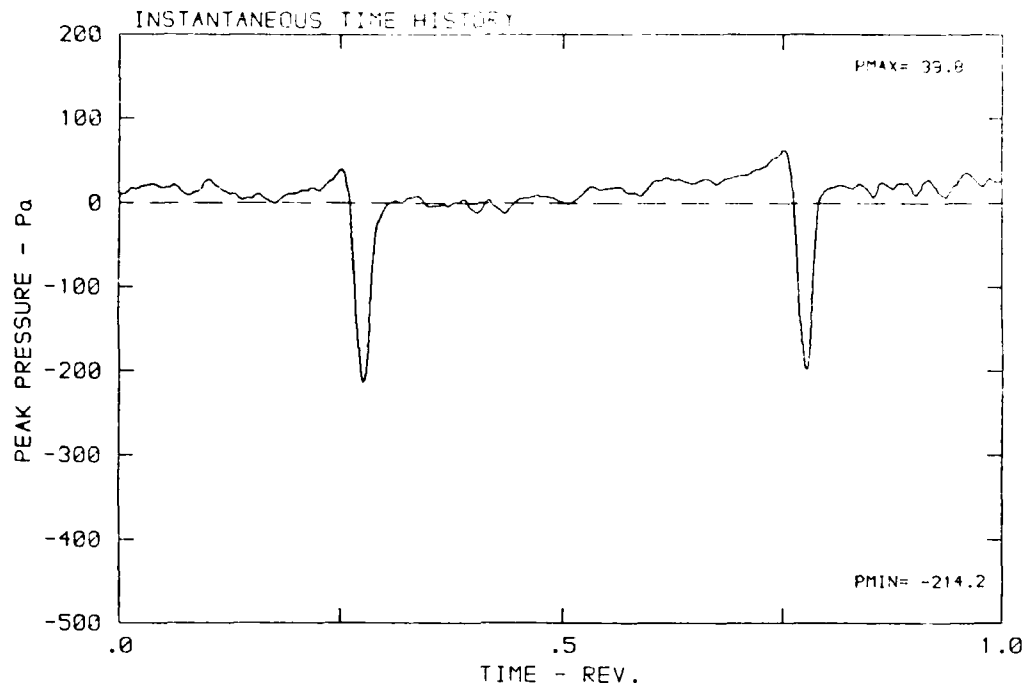
DATA POINT: LC-3 RUN: 141 MP: 3

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



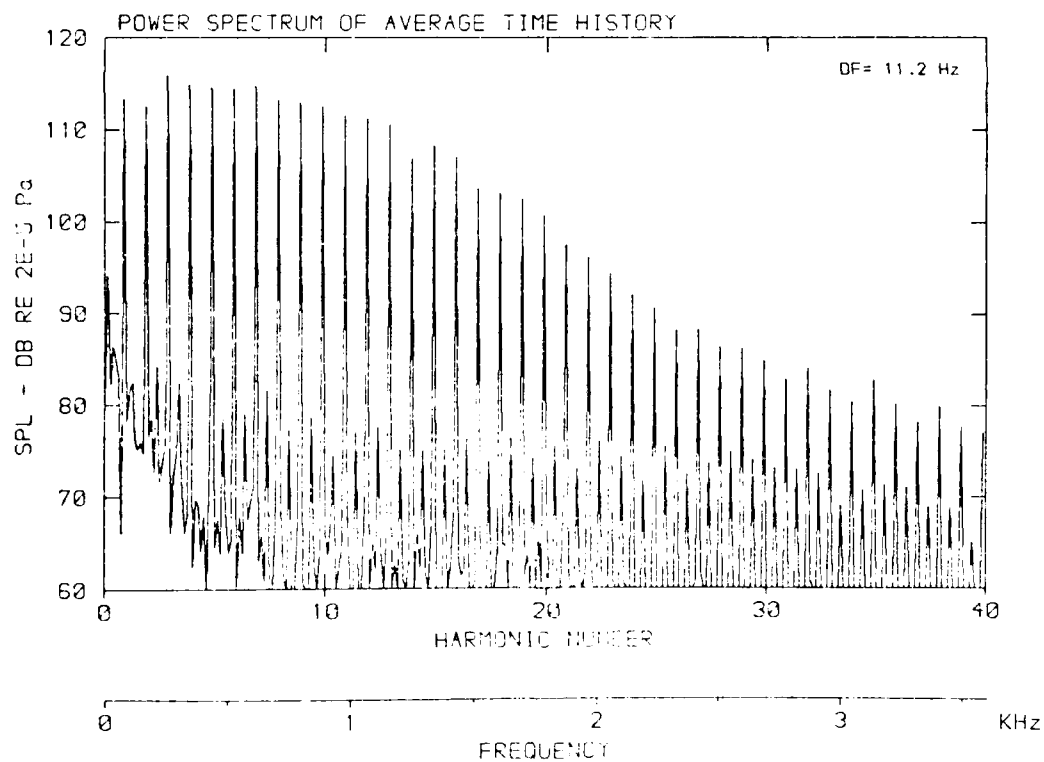
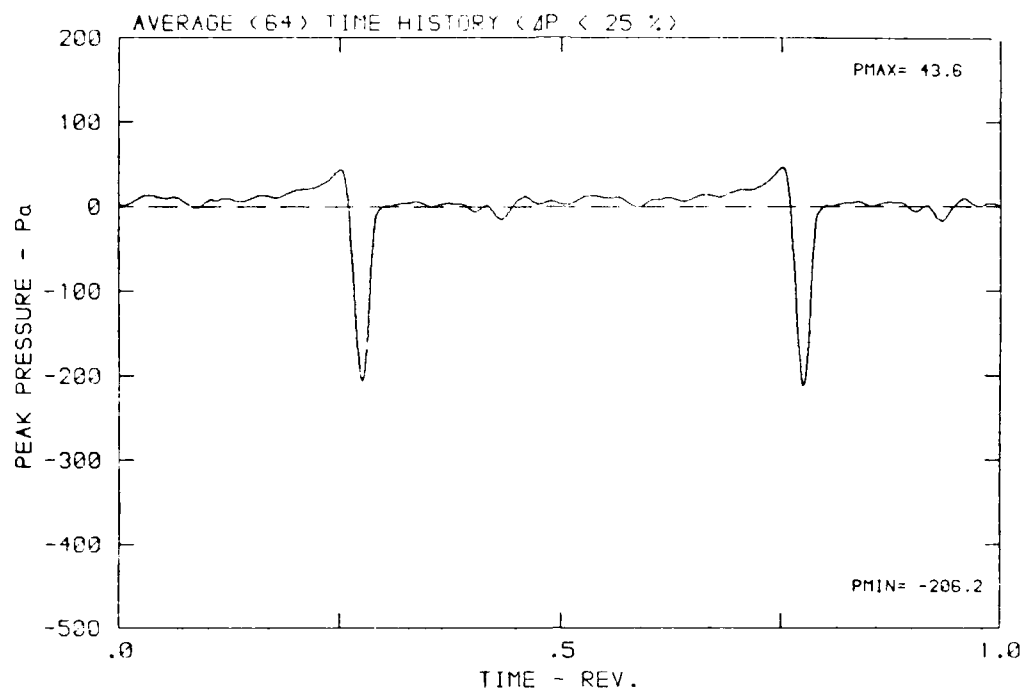
DATA POINT: LC-3 RUN: 141 MP: 4

β : 20.7° MH: .8745 n: 2700 rpm VIB: .263 ϕ : -3.6° I: 237.0



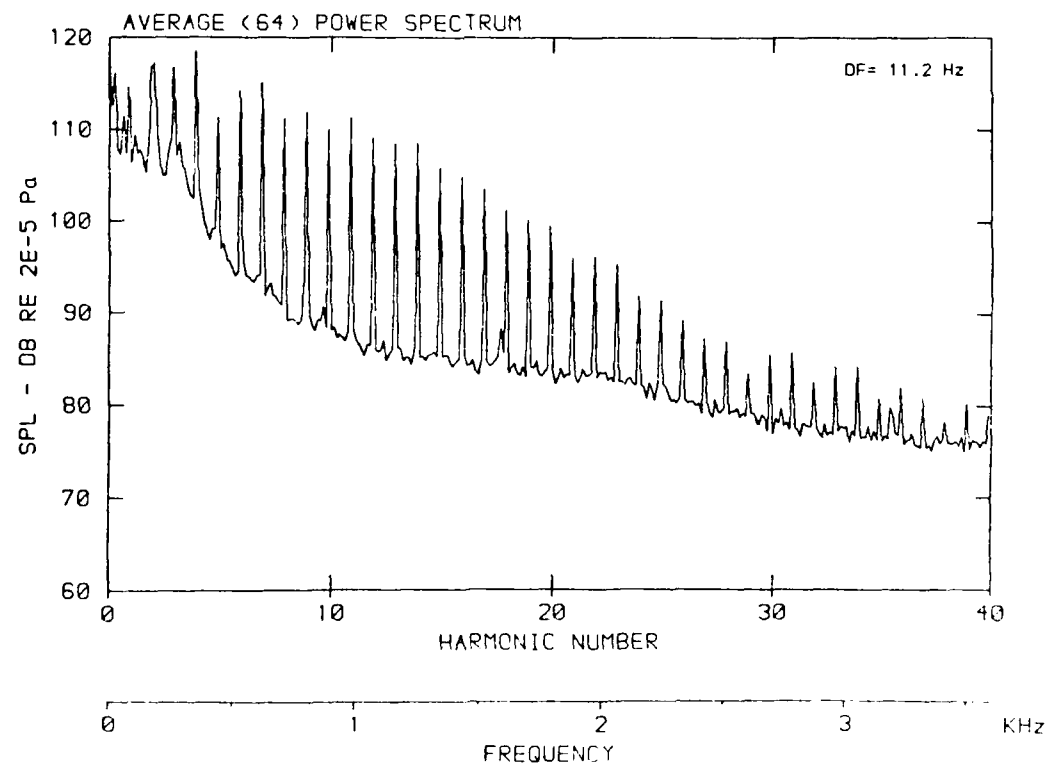
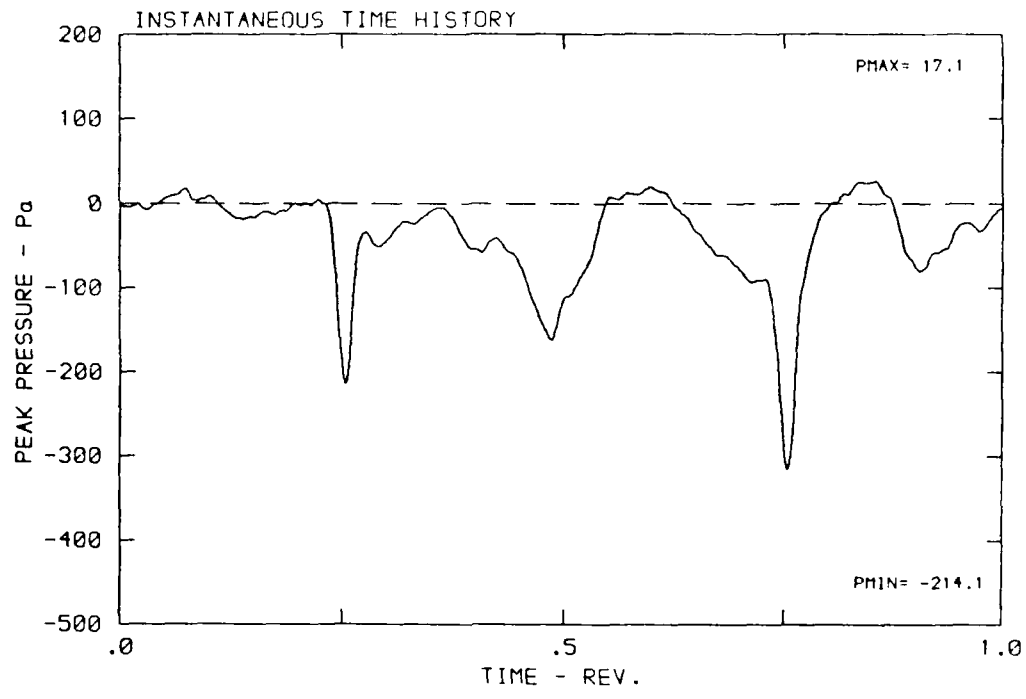
DATA POINT: 10-3 RUN: 141 MP: 4

β : 20.7° MU: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



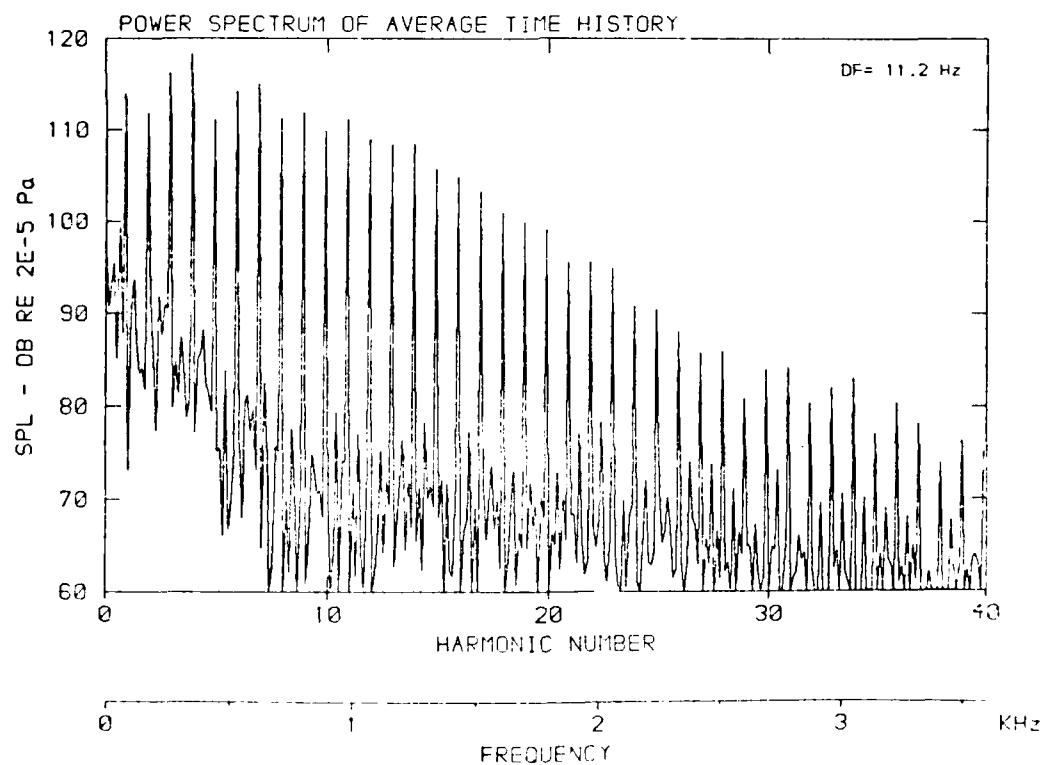
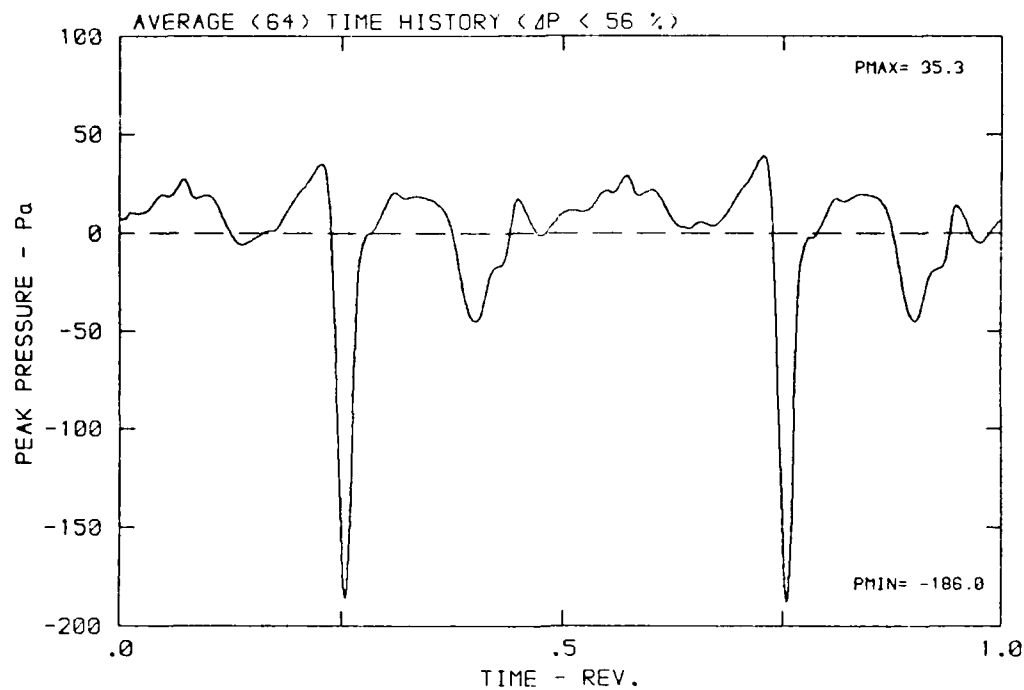
DATA POINT: LC-3 RUN: 141 MP: 5

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 237.7 K



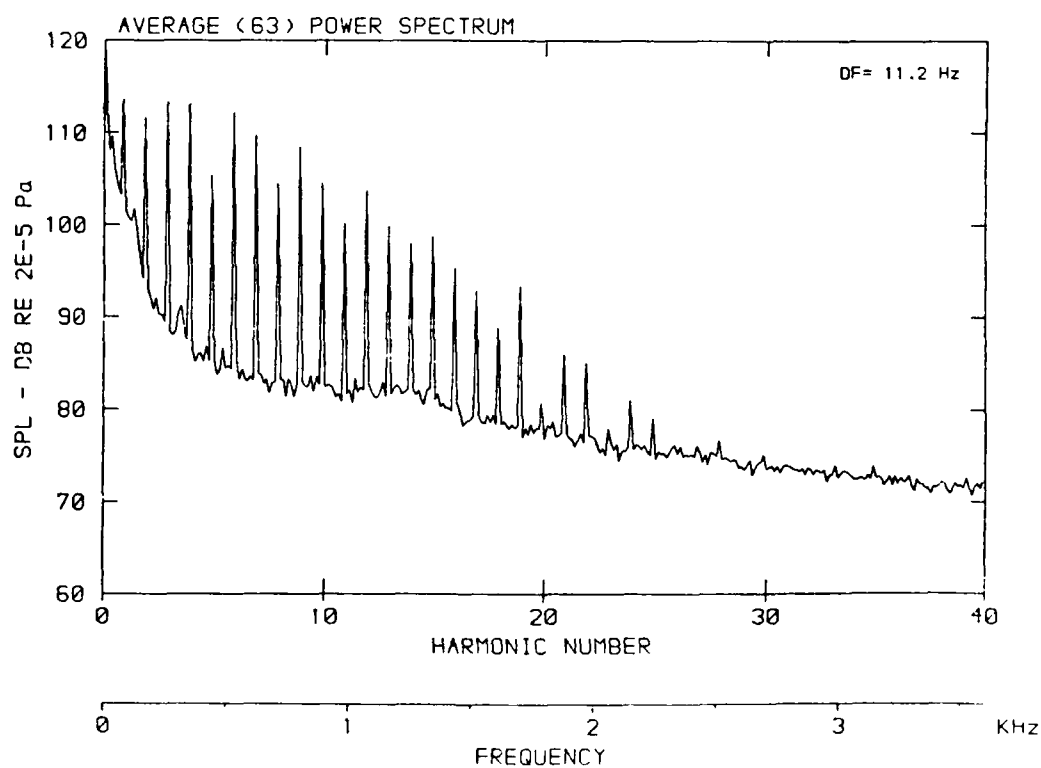
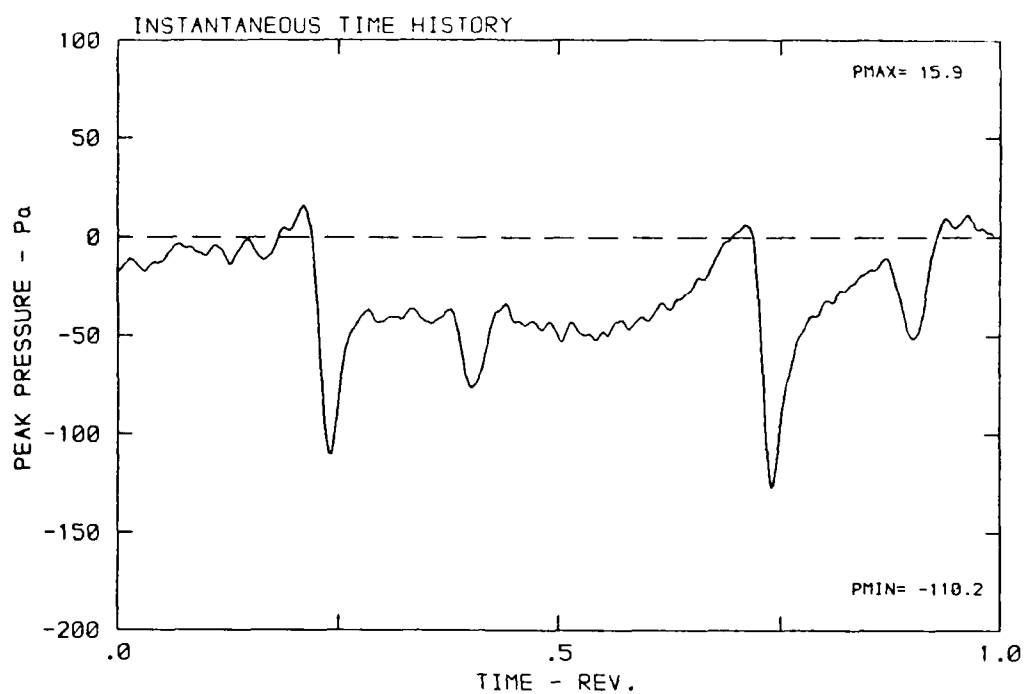
DATA POINT: LC-3 RUN: 141 MP: 5

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



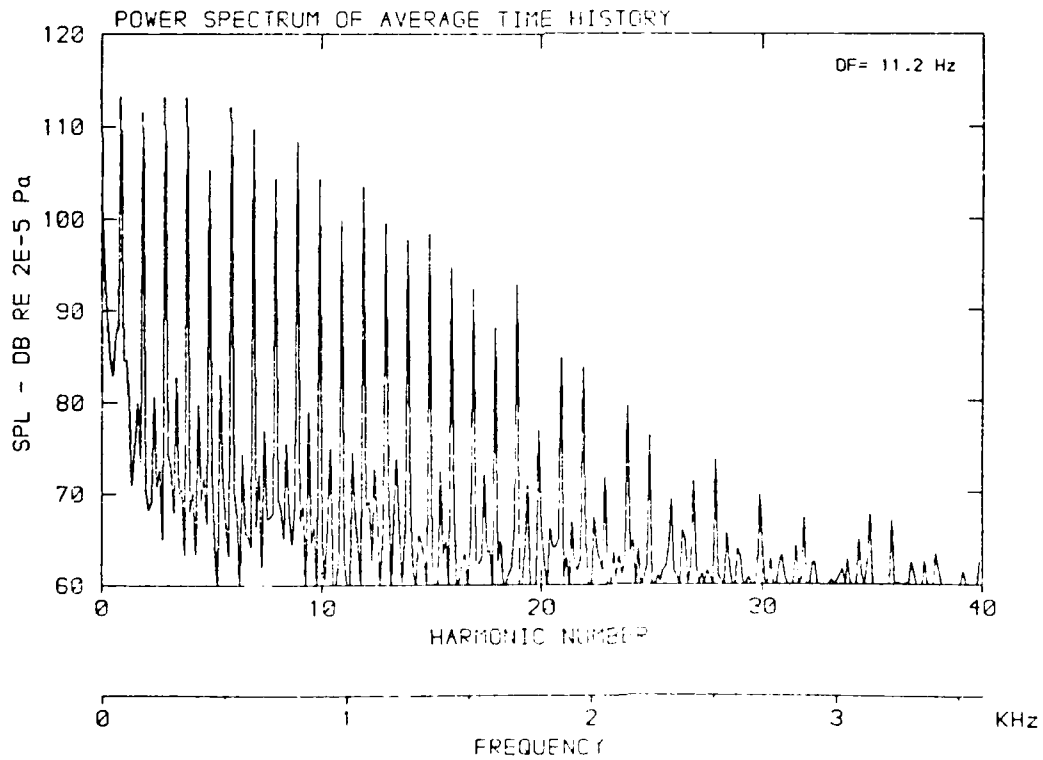
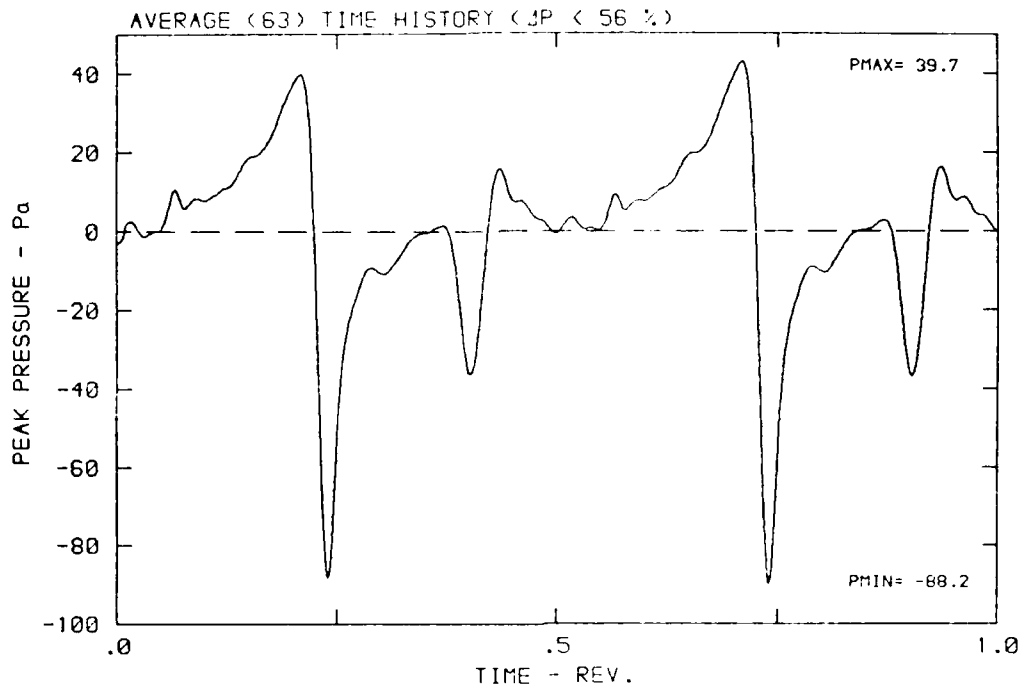
DATA POINT: LC-3 RUN: 141 MP: 6

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



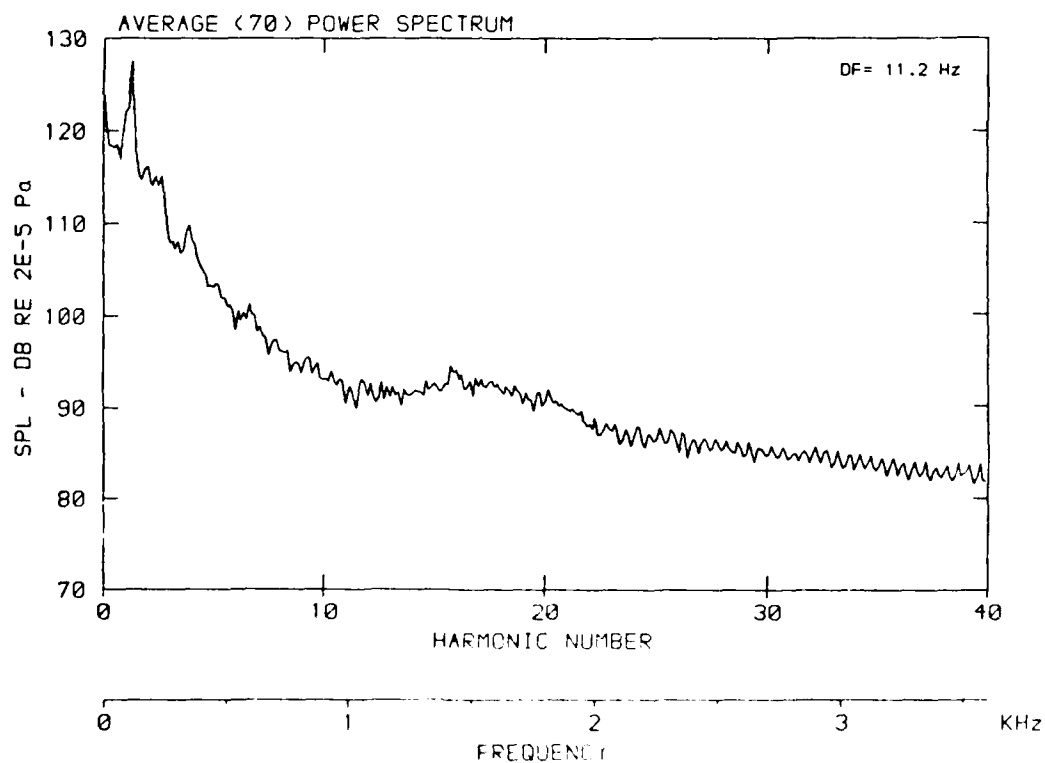
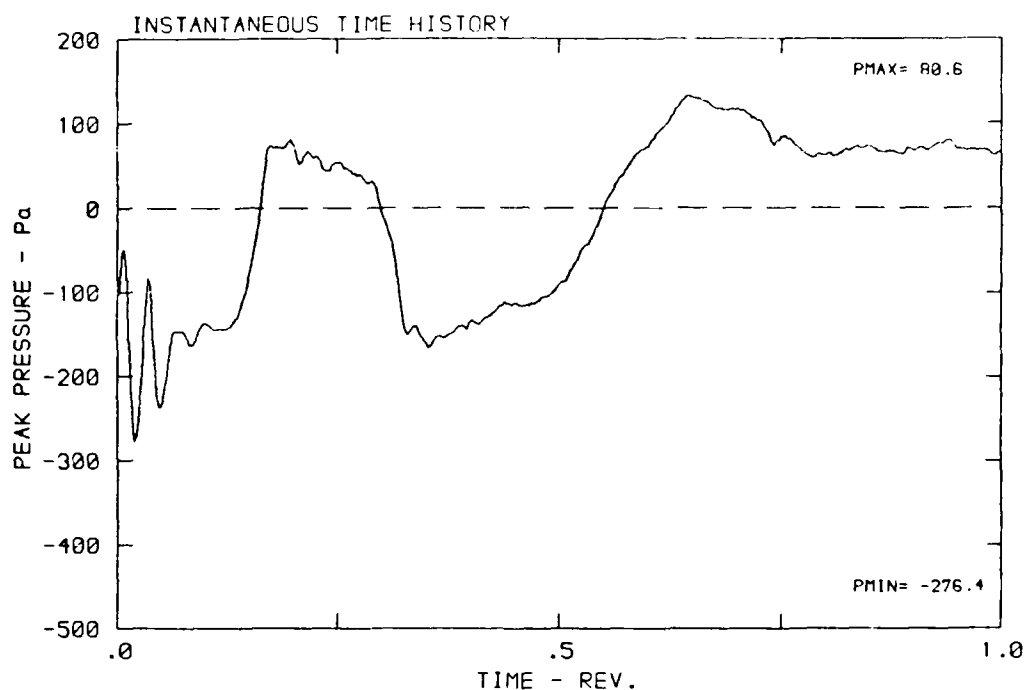
DATA POINT: LC-3 RUN: 141 MP: 6

β : 20.7° MH: .8745 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 287.7 K



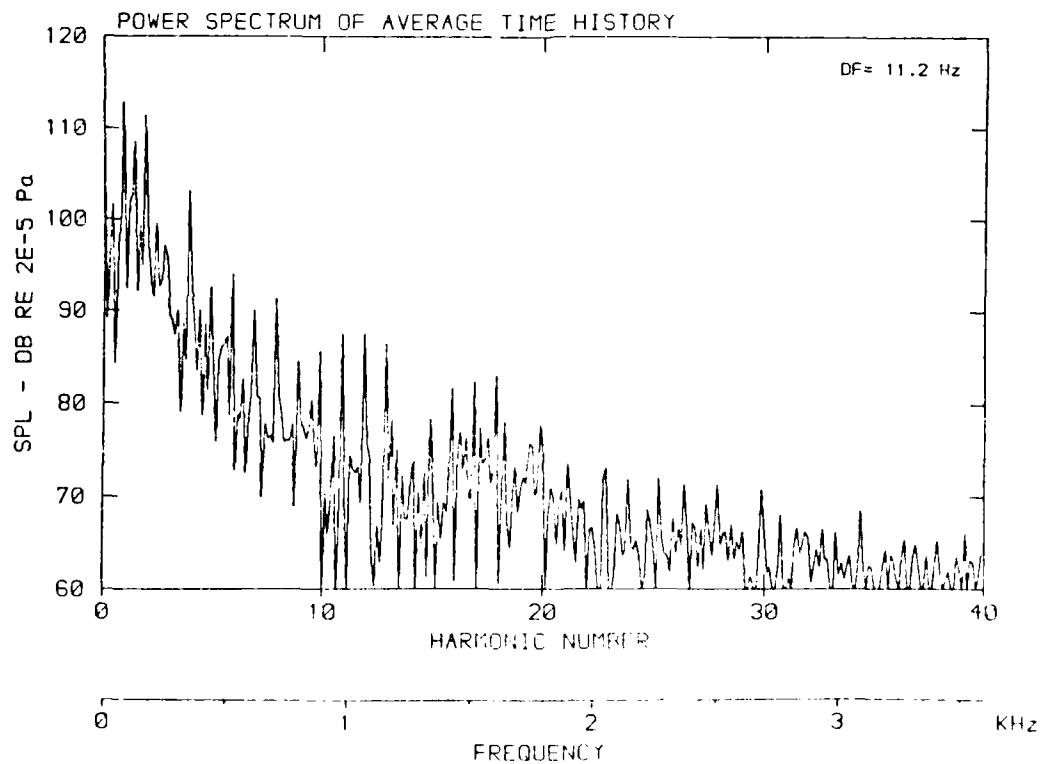
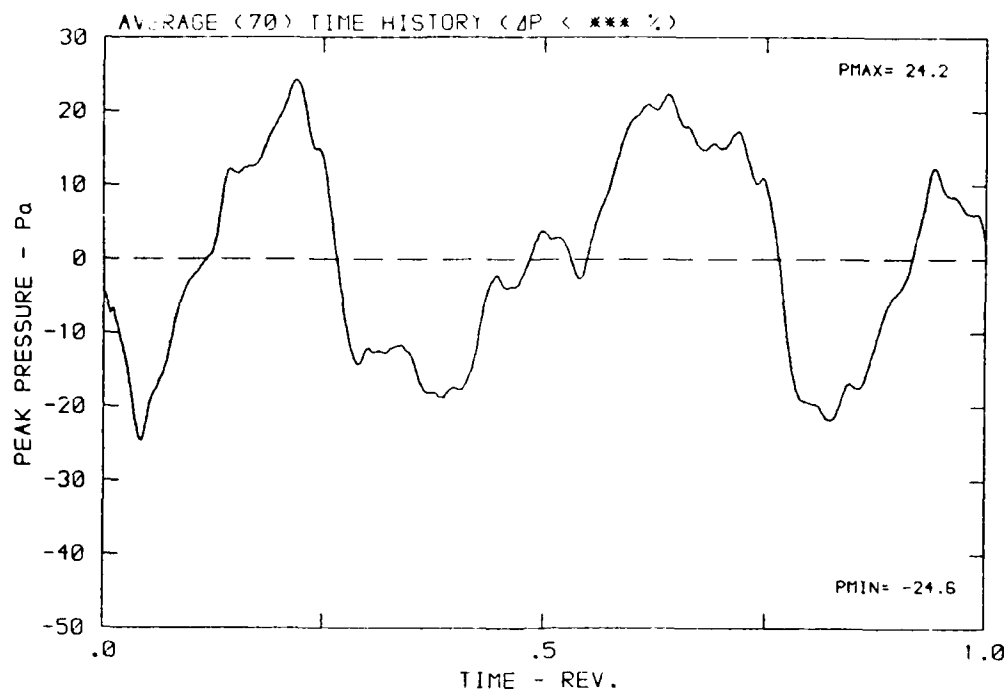
DATA POINT: LC-3 RUN: 141 MP: 7

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 237.7 K



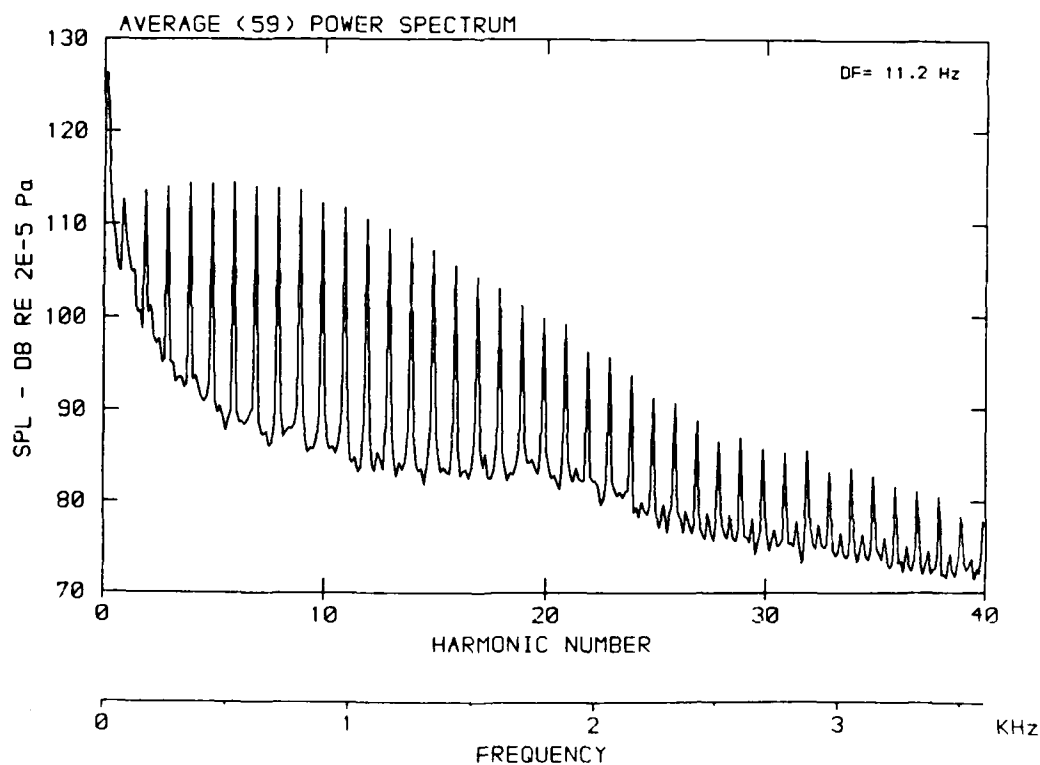
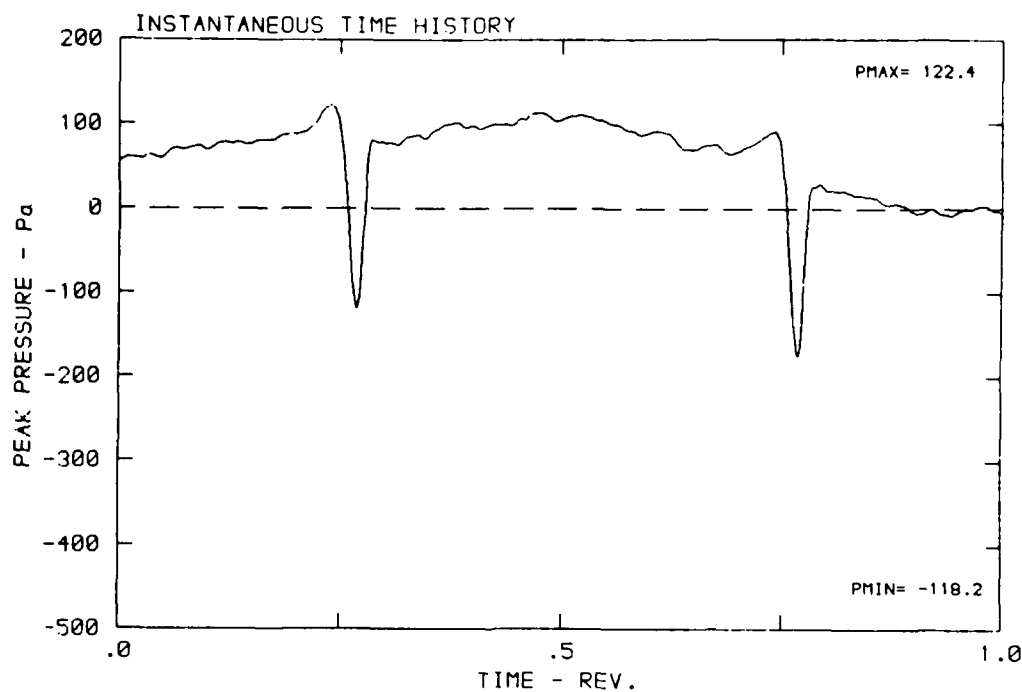
DATA POINT: LC-3 RUN: 141 MP: 7

β : 20.7° MH: .8745 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 287.7 K



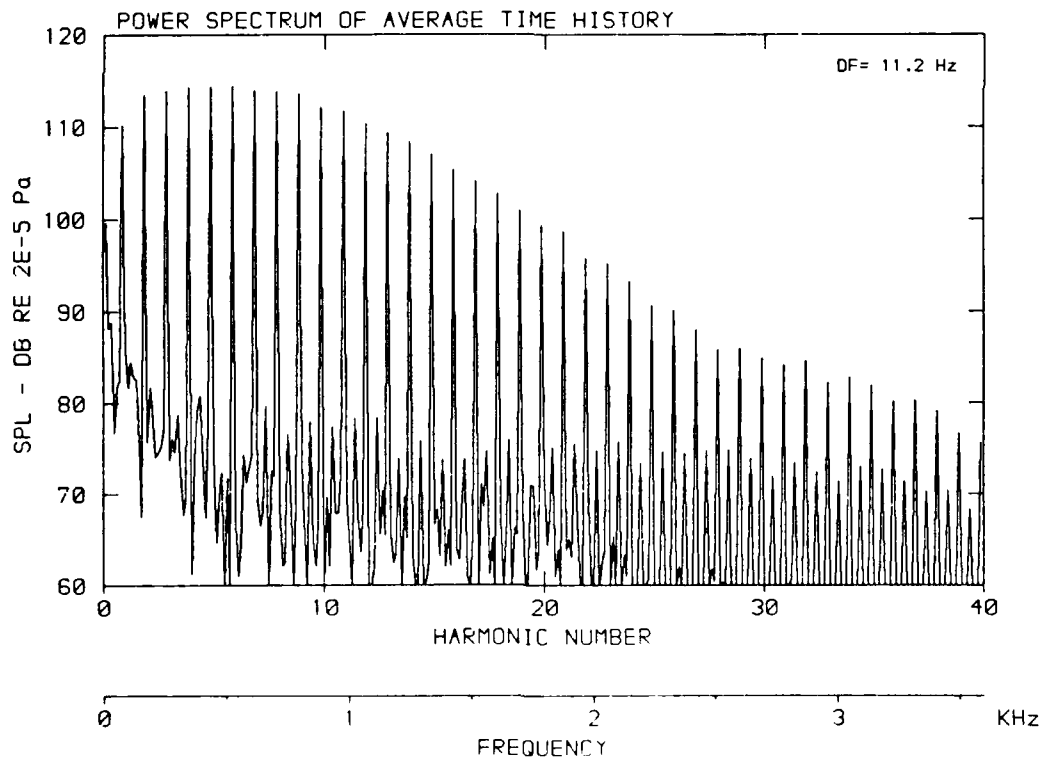
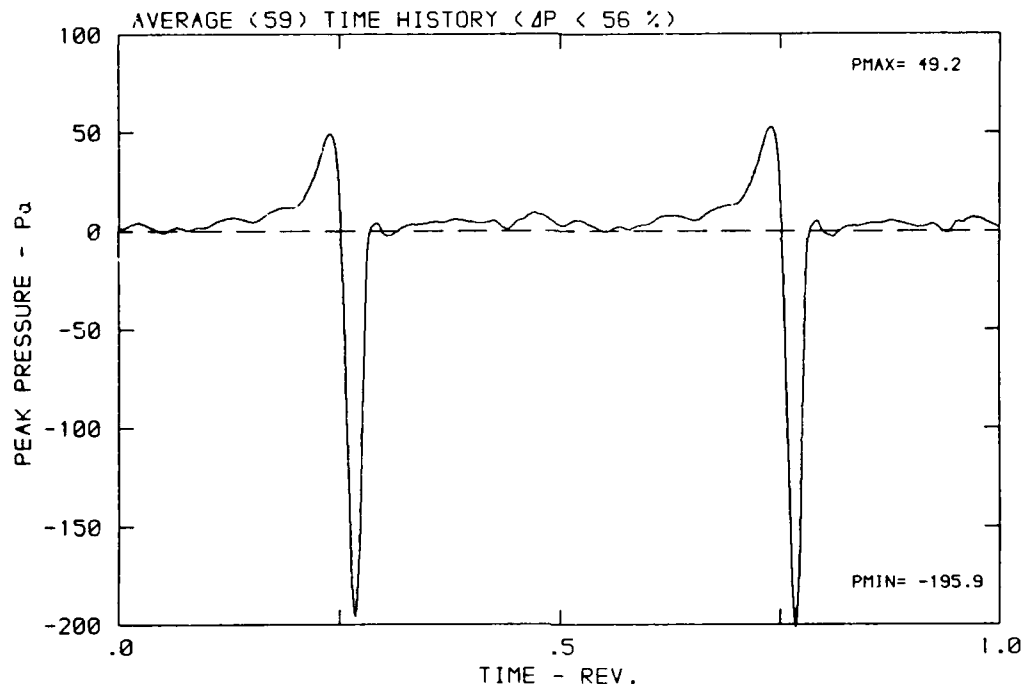
DATA POINT: LC-3 RUN: 141 MP: 8

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



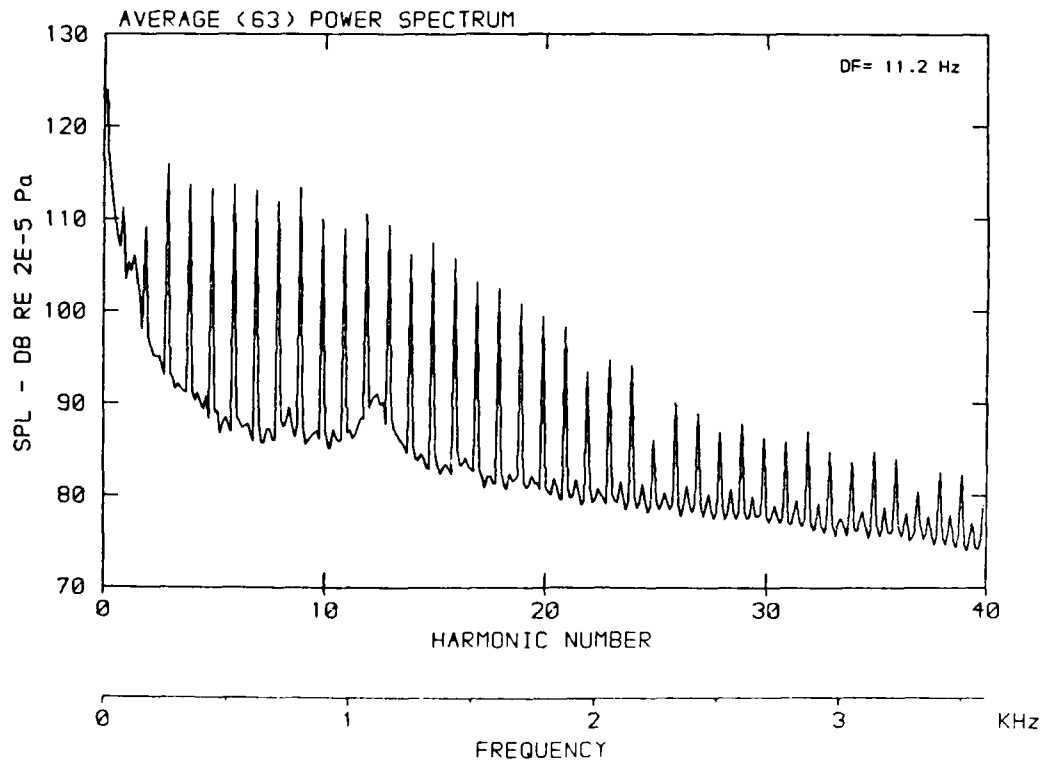
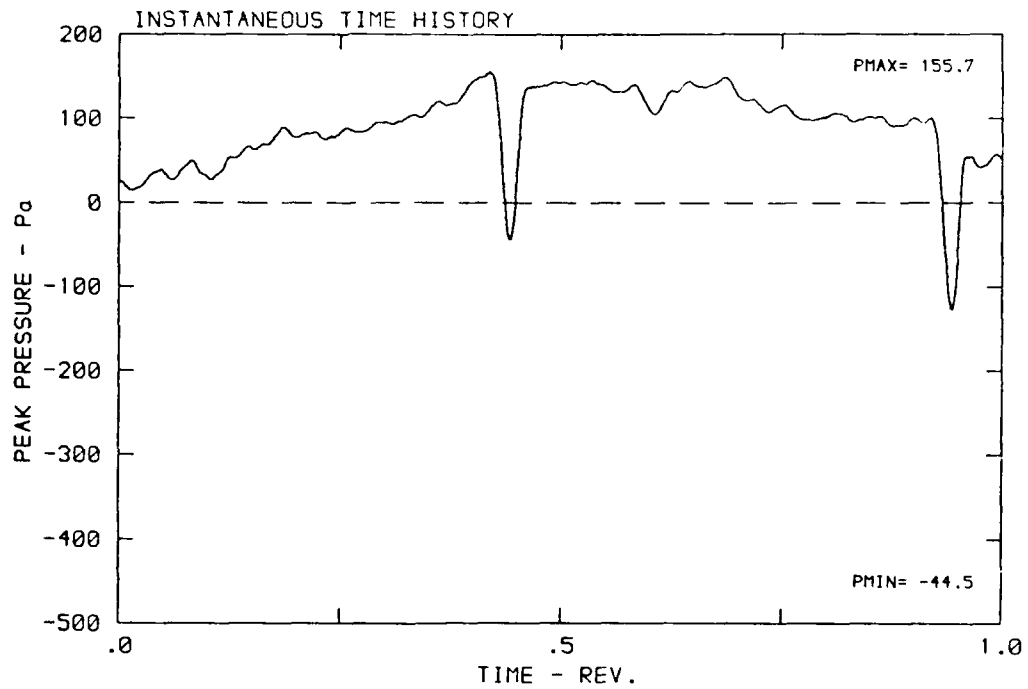
DATA POINT: LC-3 RUN: 141 MP: 8

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



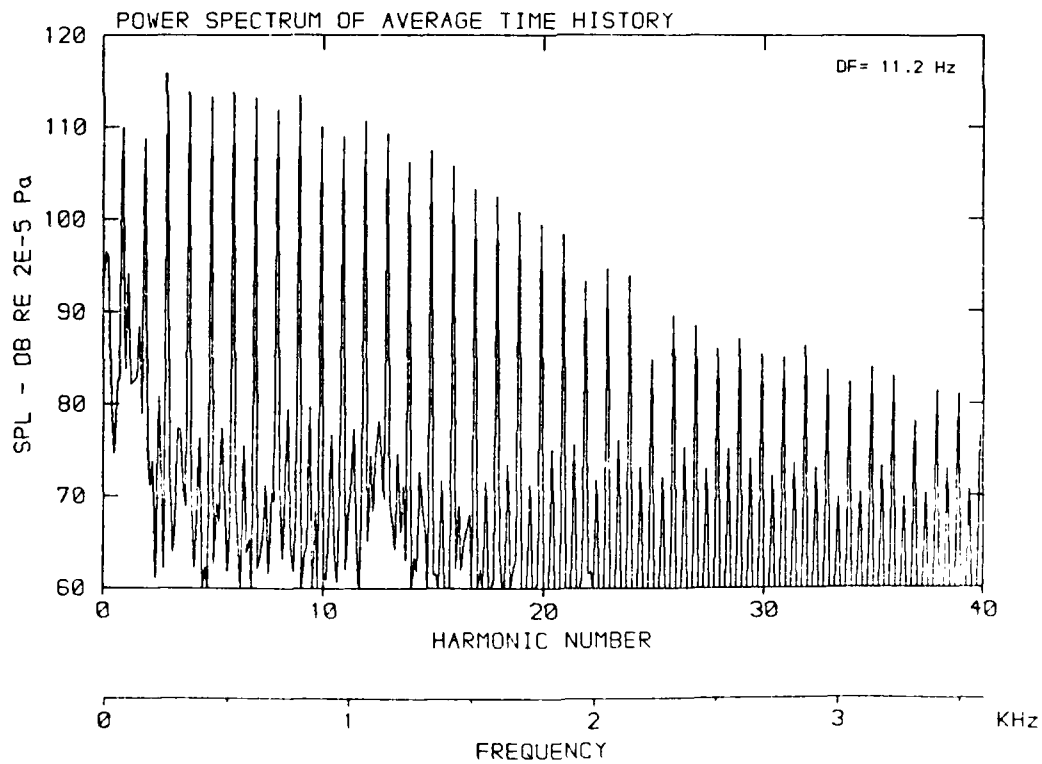
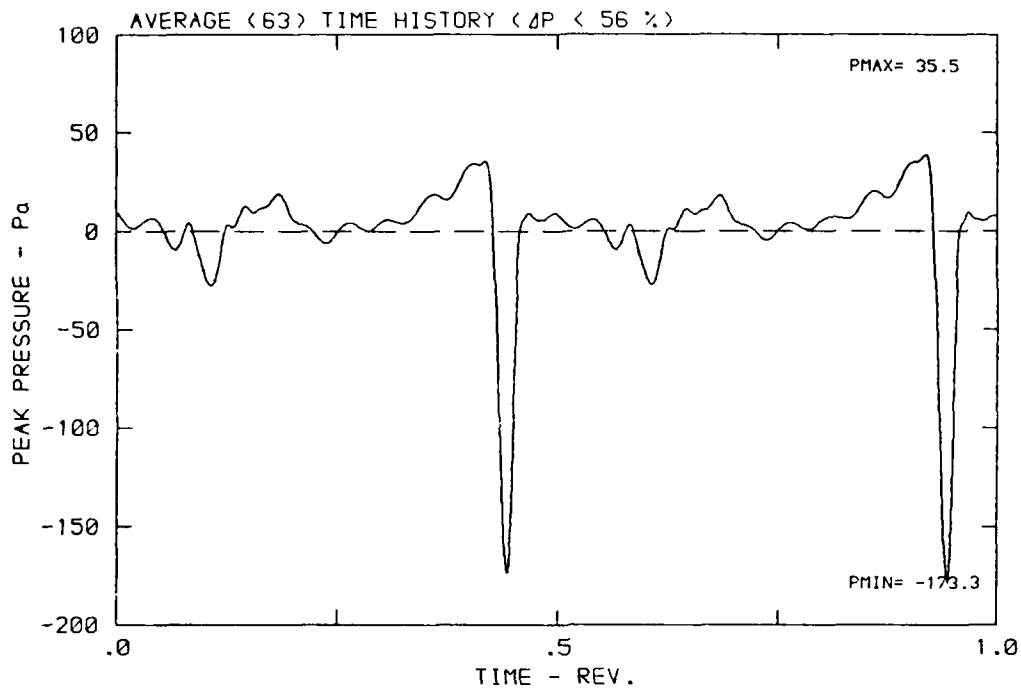
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β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 237.7 K



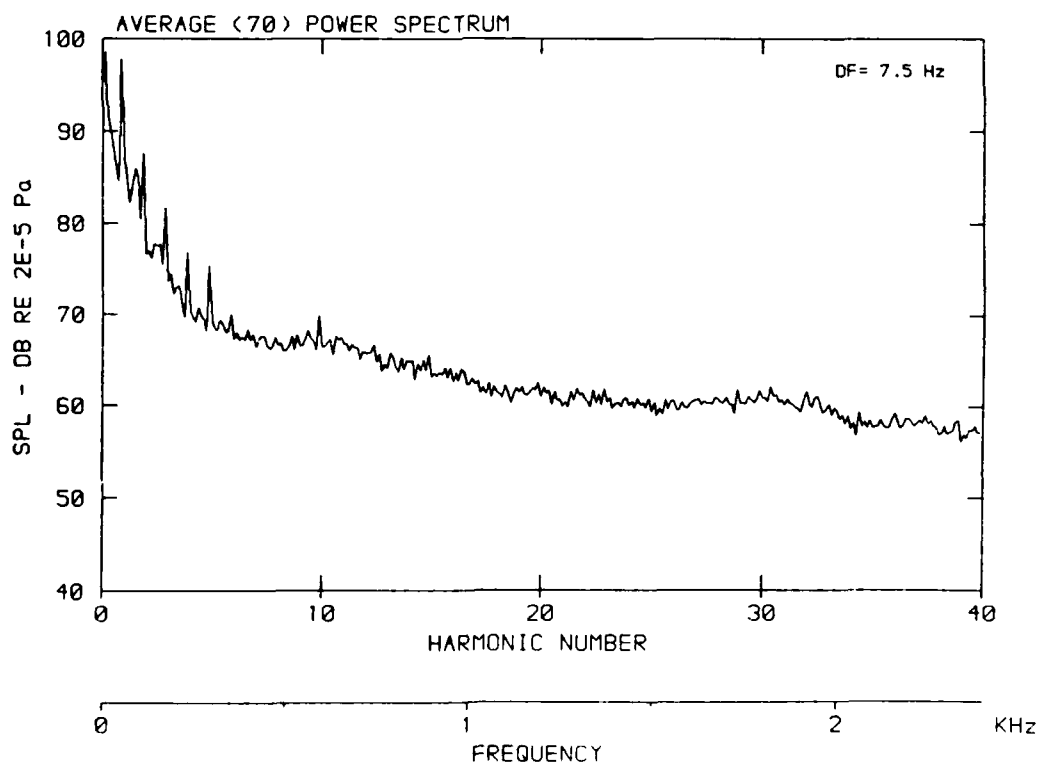
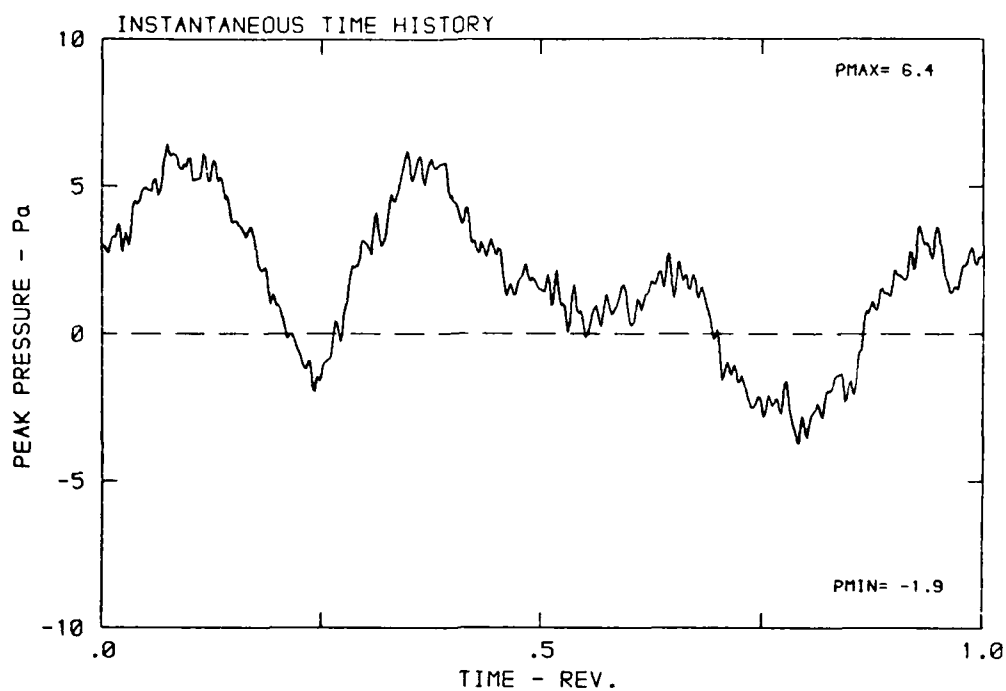
DATA POINT: LC-3 RUN: 141 MP: 9

β : 20.7° MH: .8745 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 287.7 K



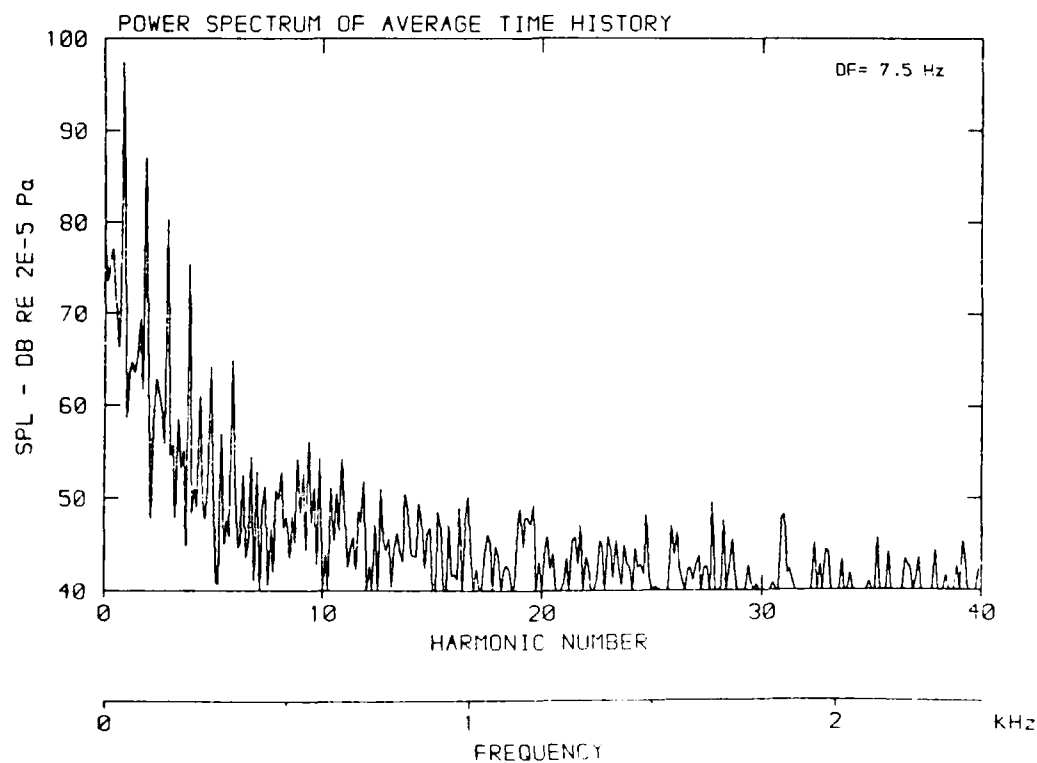
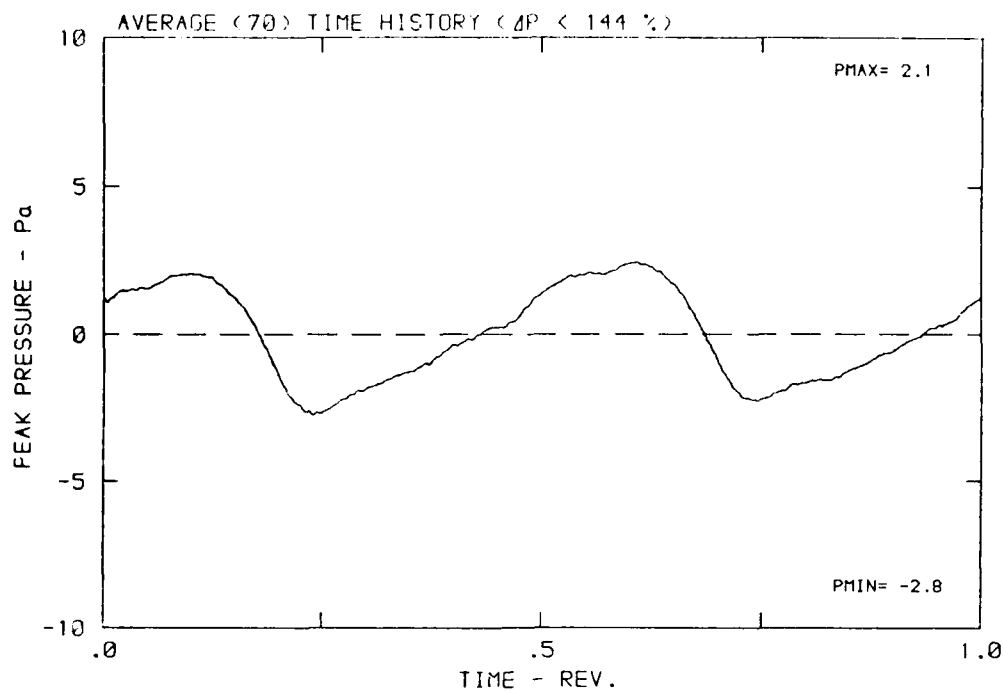
DATA POINT: LC-4 RUN: 136 MP: 1

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



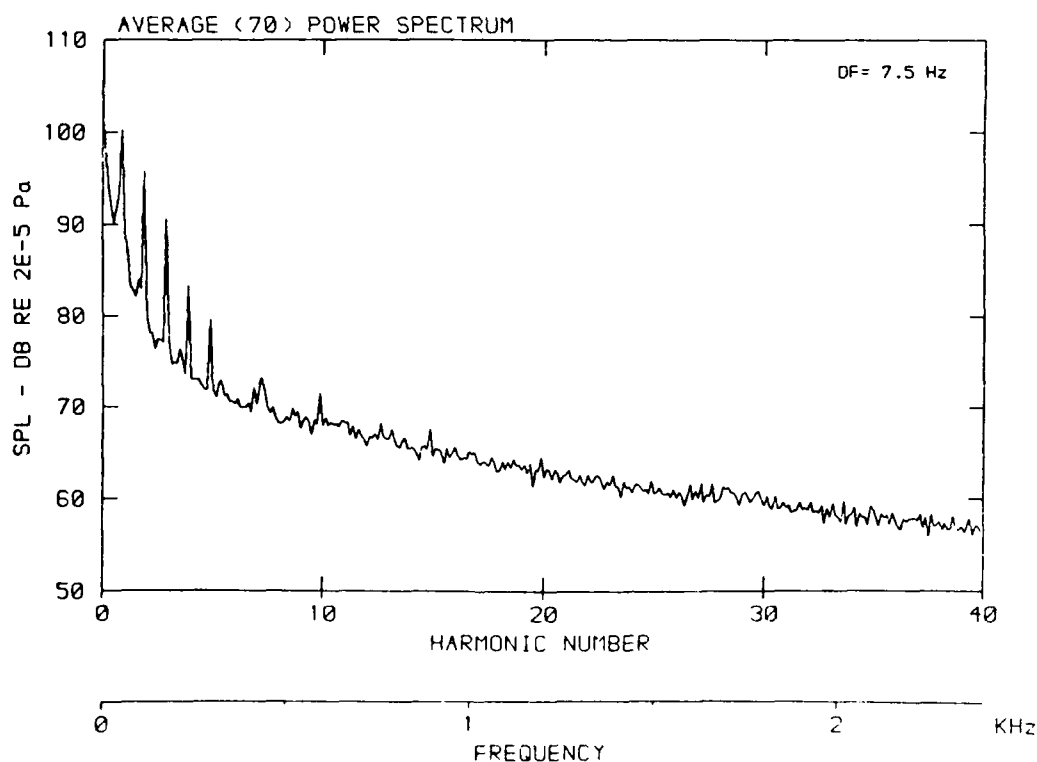
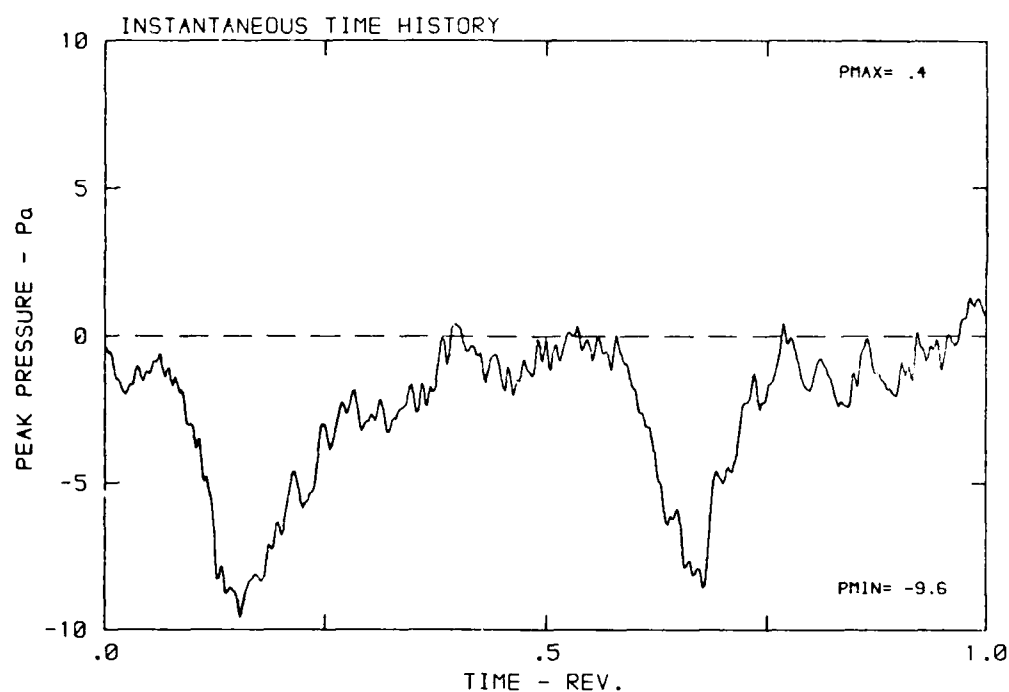
DATA POINT: LC-4 RUN: 136 MP: 1

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



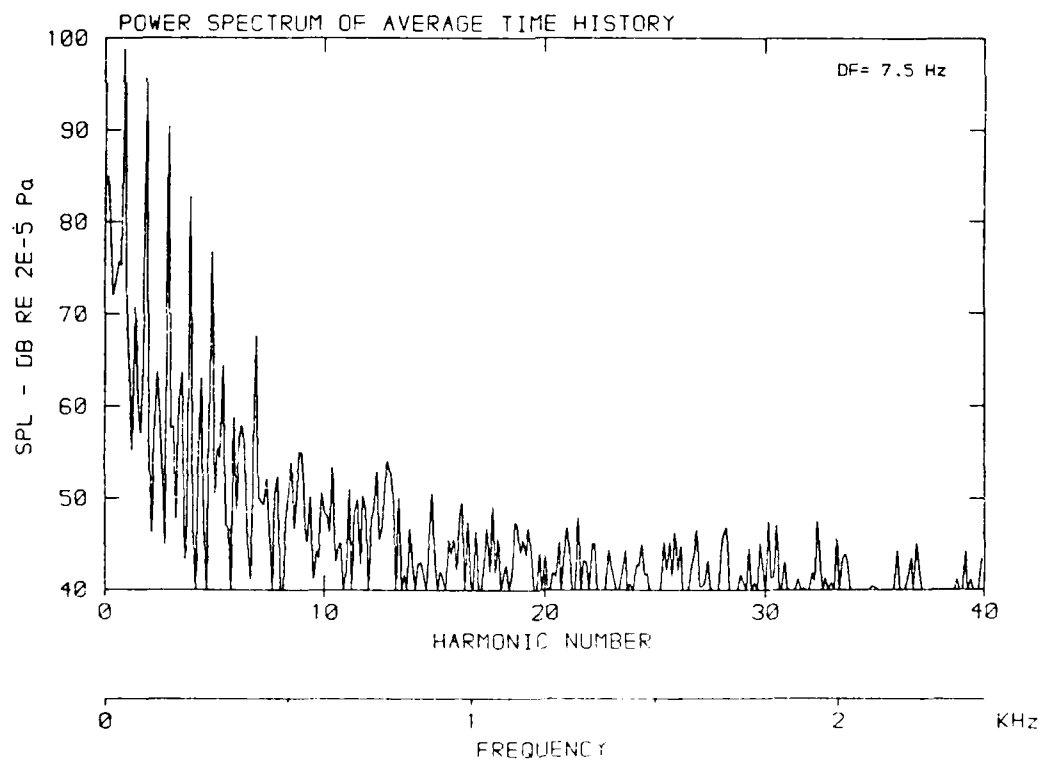
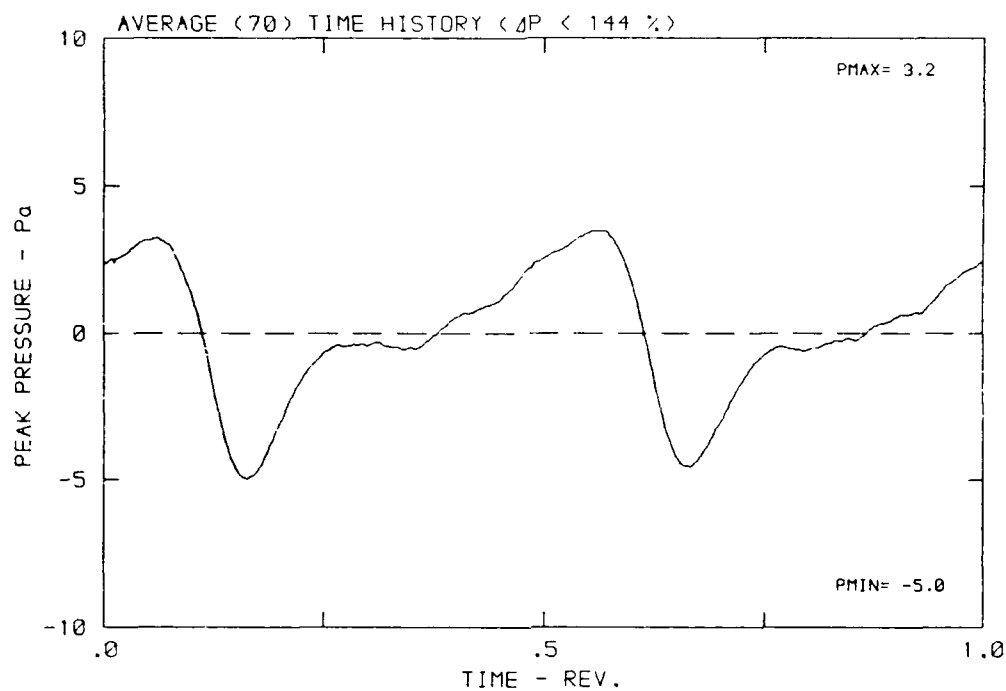
DATA POINT: LC-4 RUN: 136 MP: 2

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 °



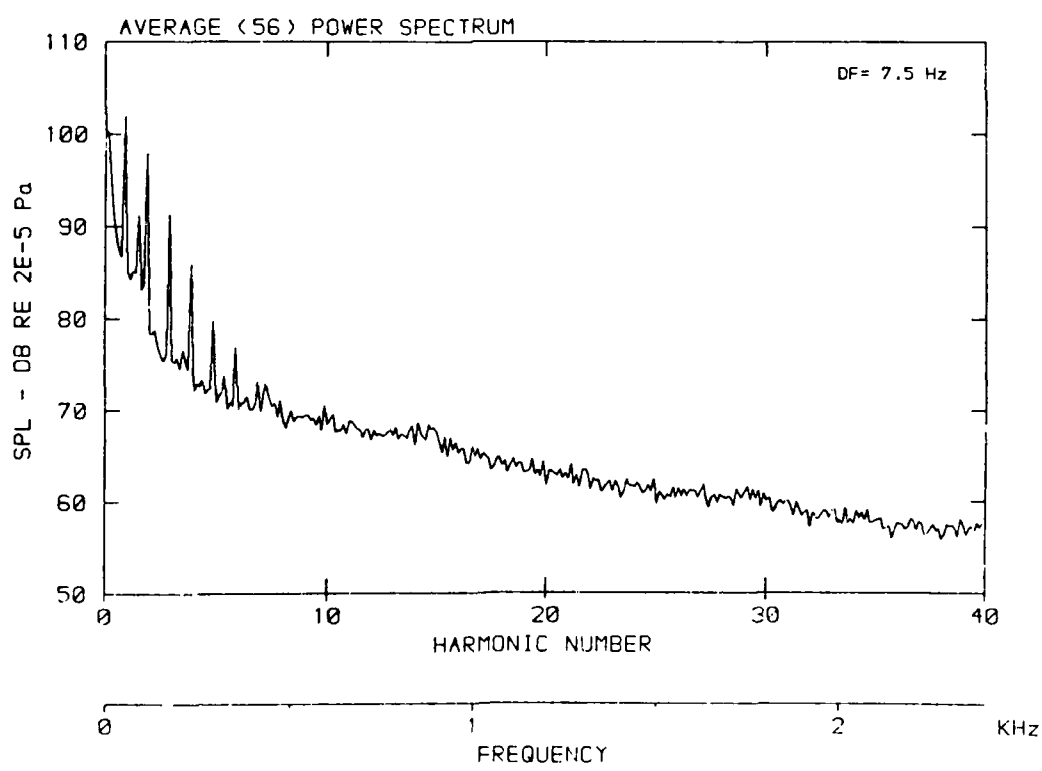
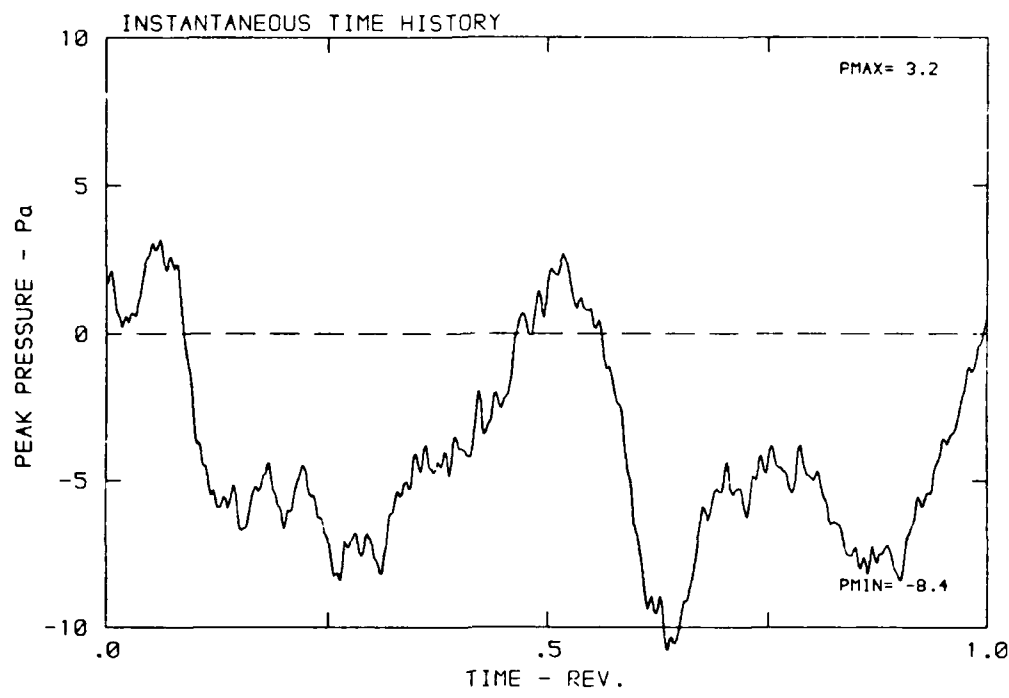
DATA POINT: LC-4 RUN: 136 MP: 2

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



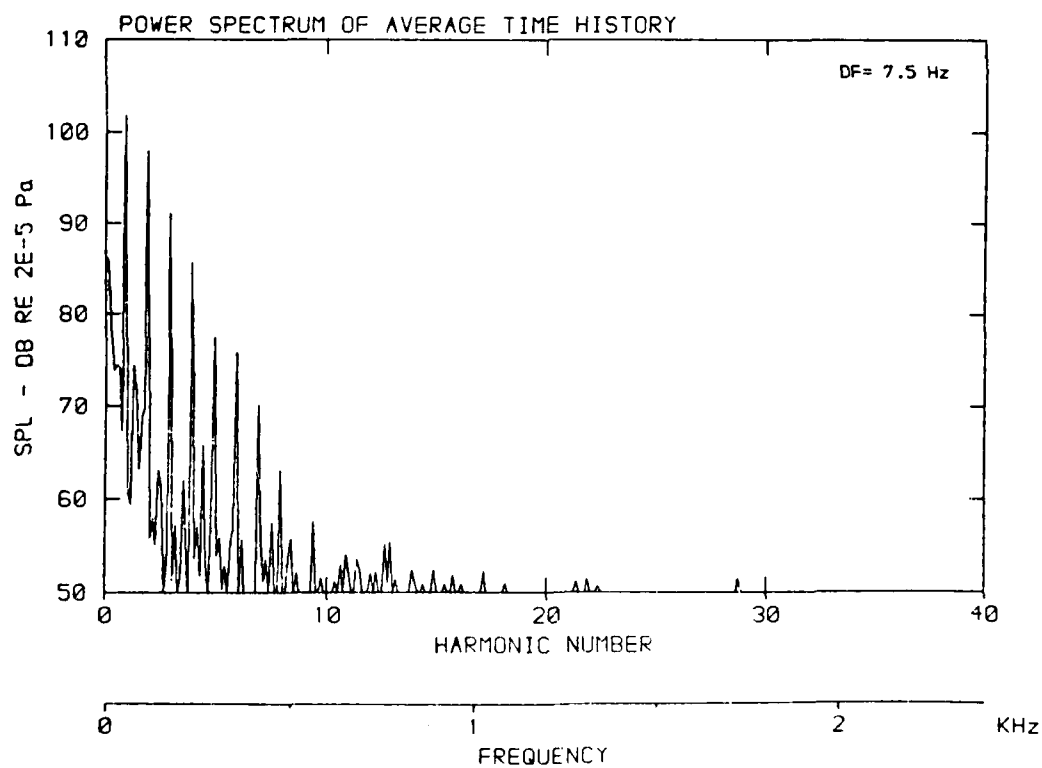
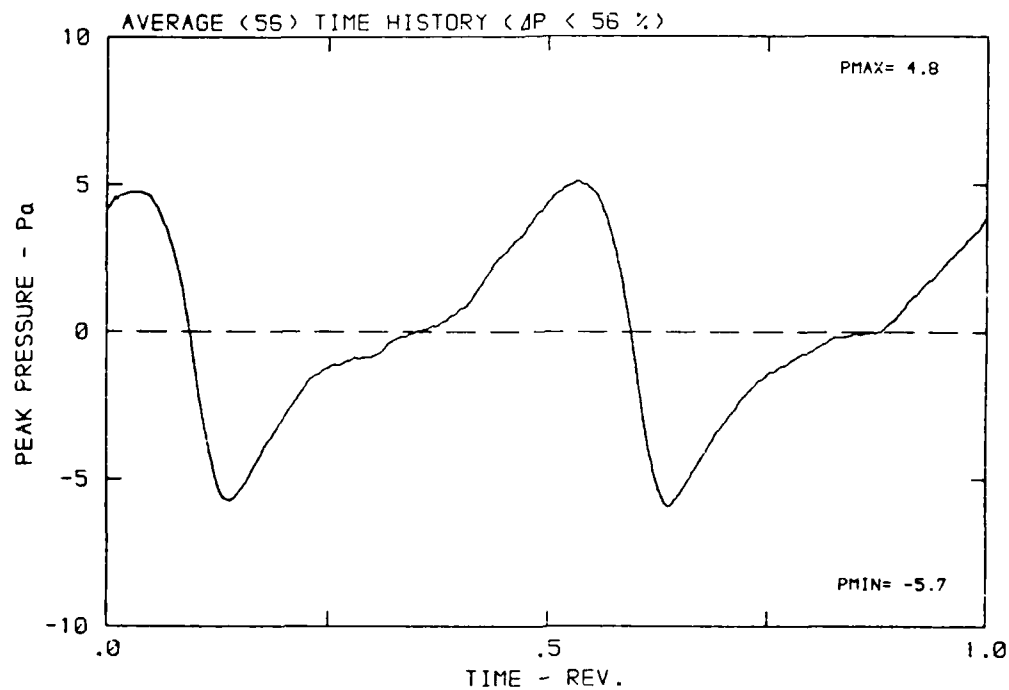
DATA POINT: LC-4 RUN: 136 MP: 3

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 285.7 K



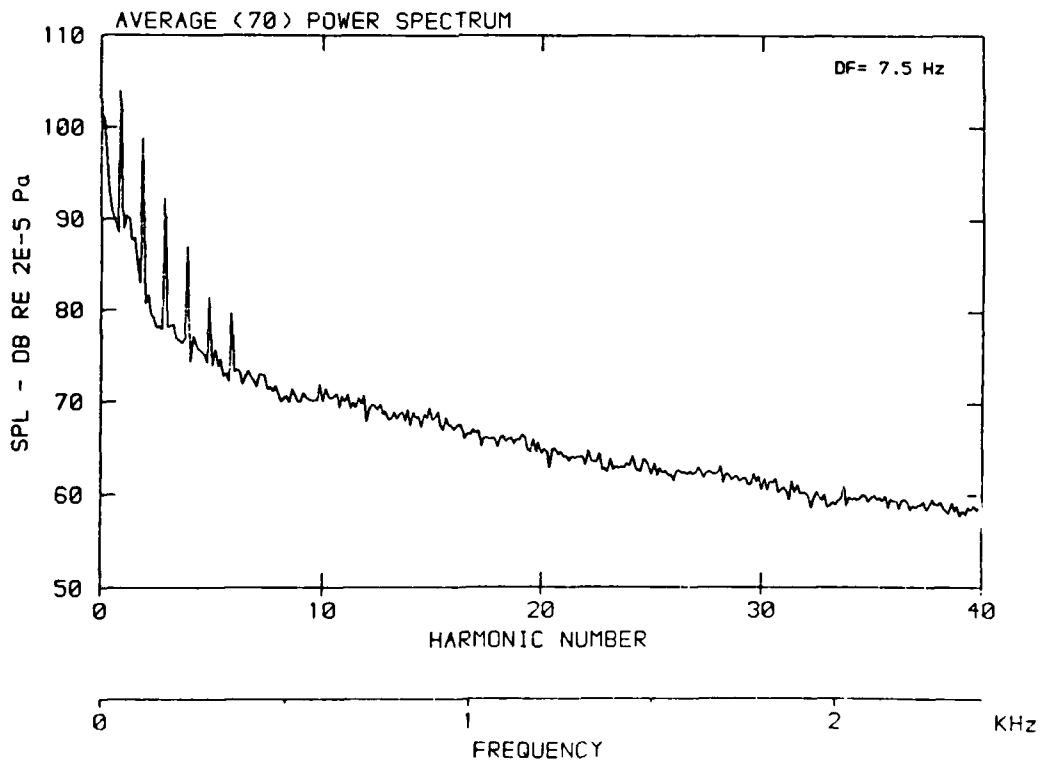
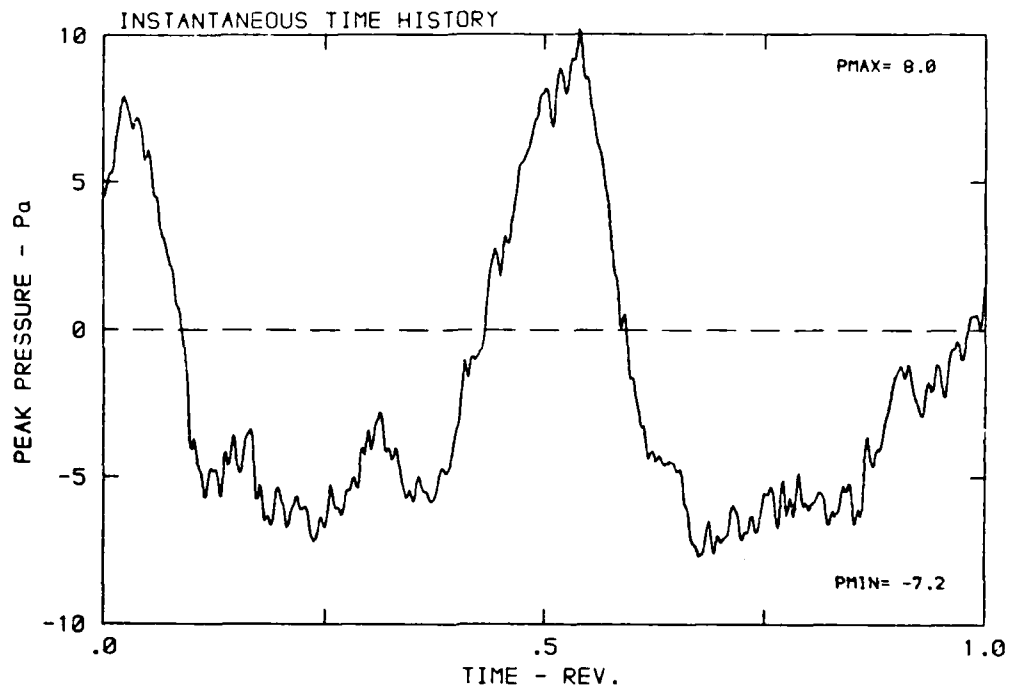
DATA POINT: LC-4 RUN: 136 MP: 3

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



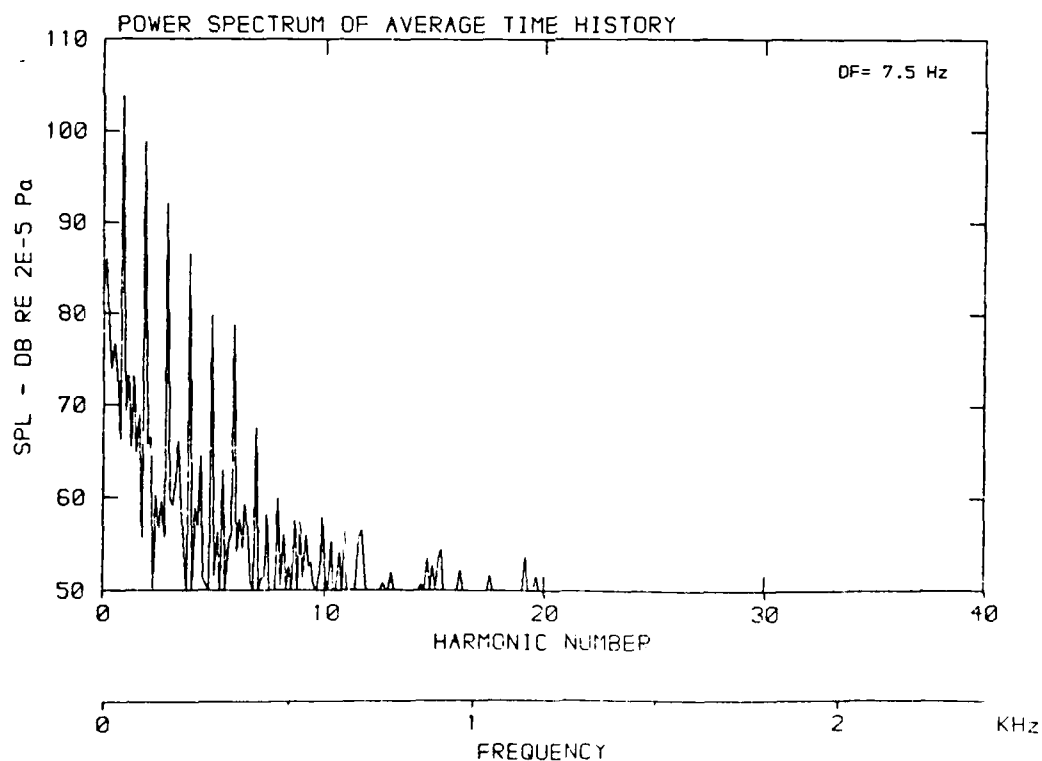
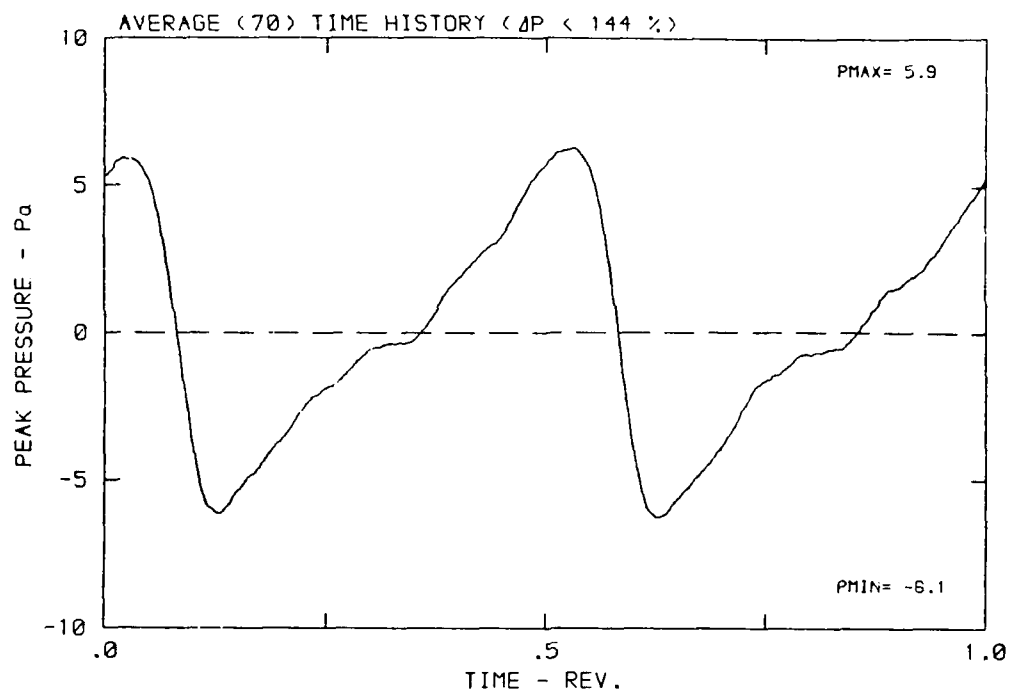
DATA POINT: LC-4 RUN: 136 MP: 4

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



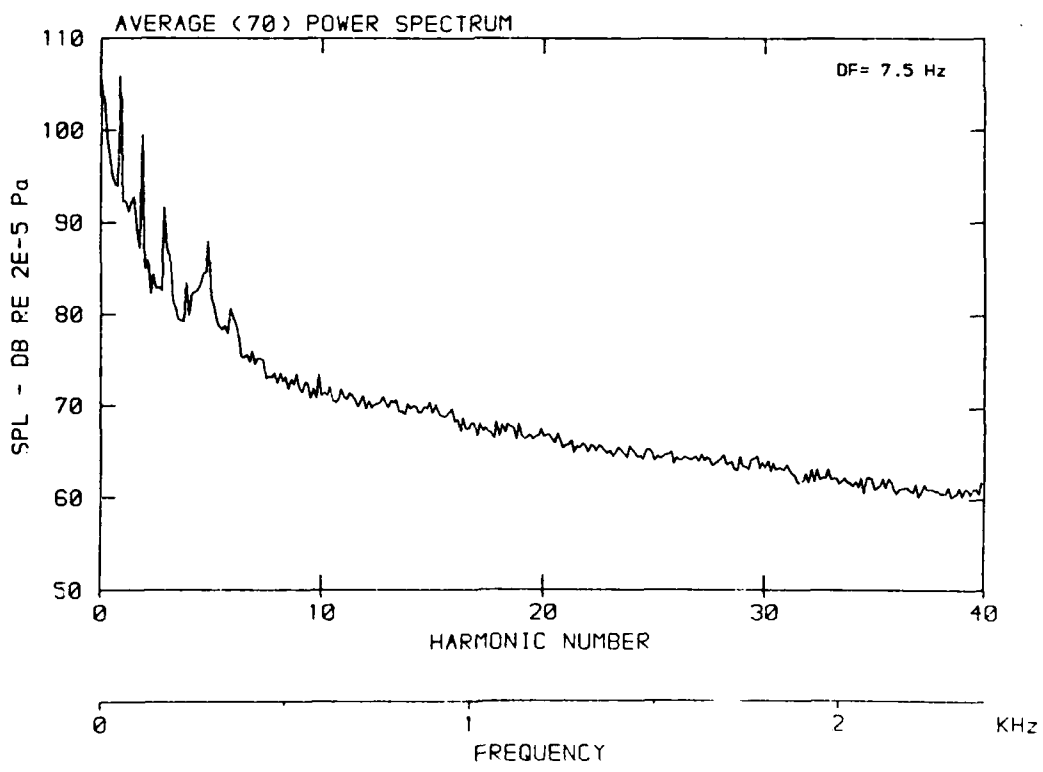
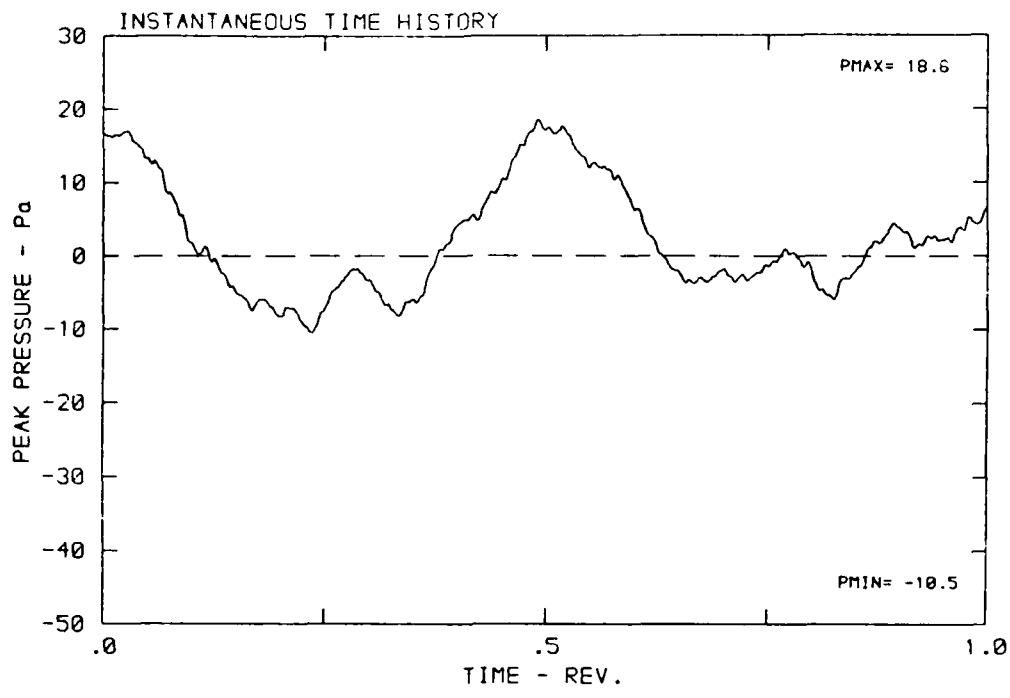
DATA POINT: LC-4 RUN: 136 MP: 4

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



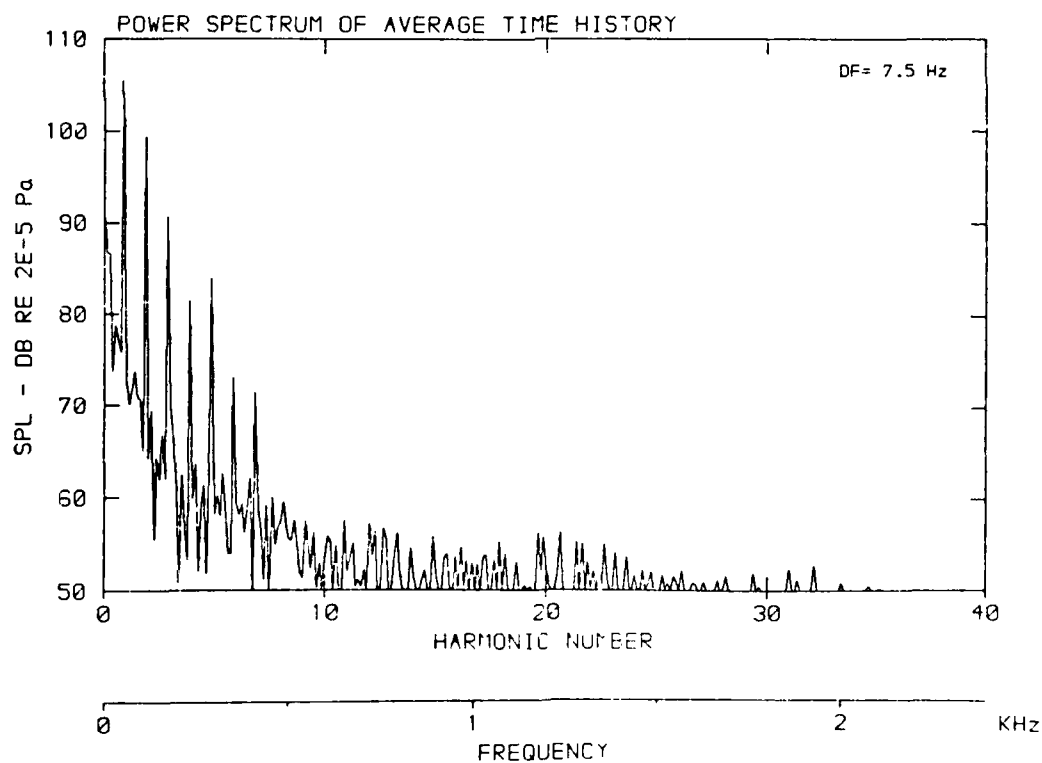
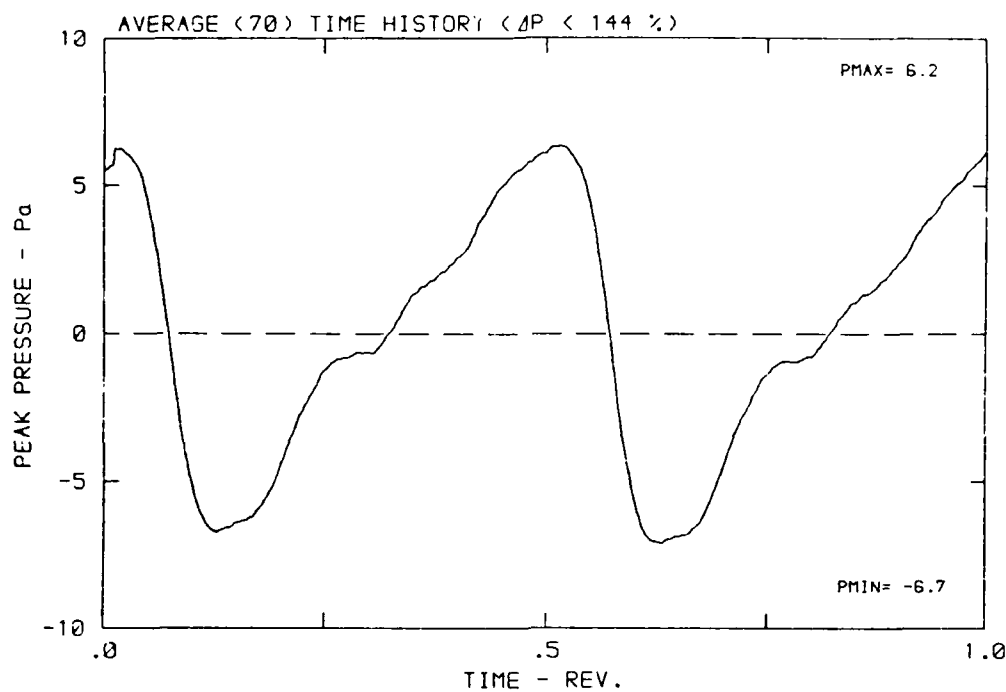
DATA POINT: LC-4 RUN: 136 MP: 5

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 266.7 K



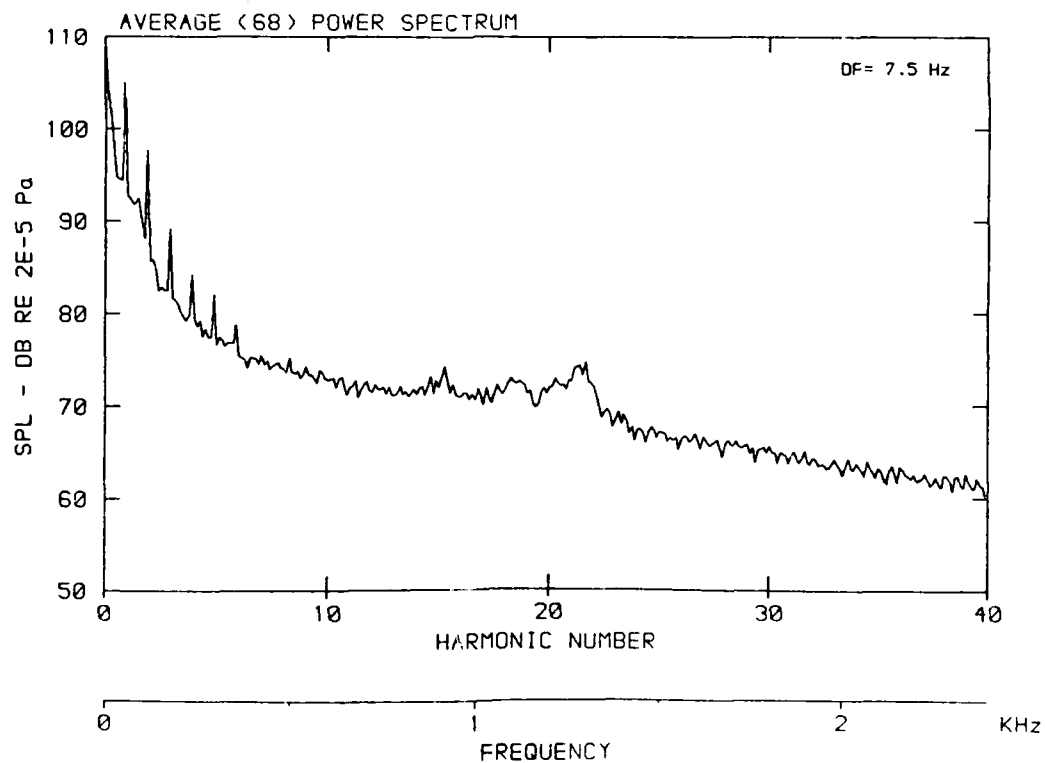
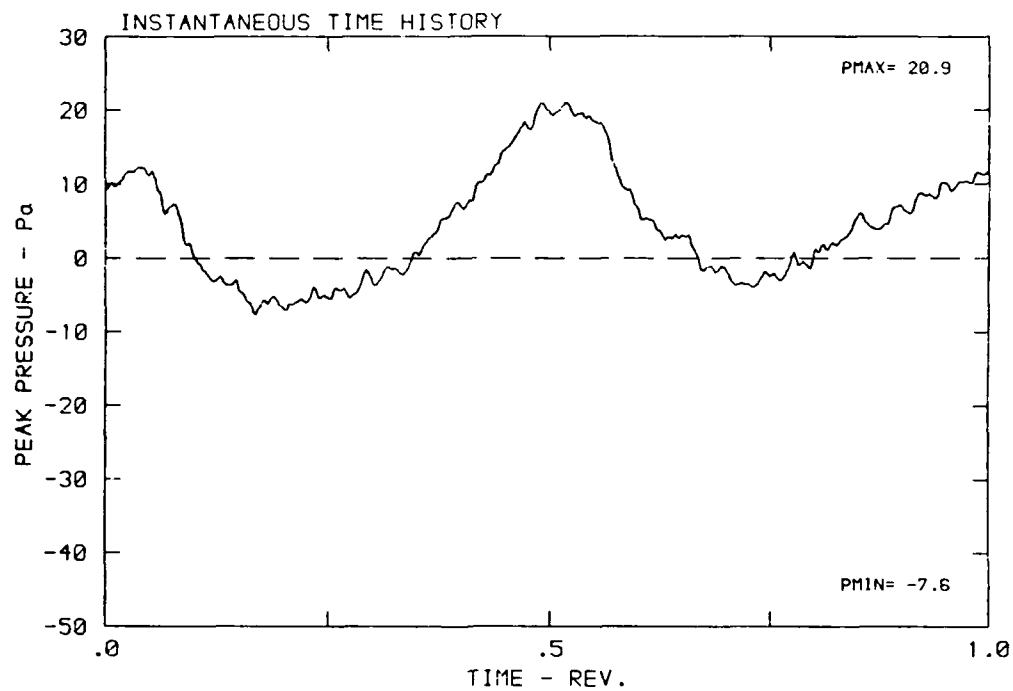
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β : 24.4° MH: .5840 n: 1800 rpm v/u : .267 ϕ : -3.8° T: 286.7 K



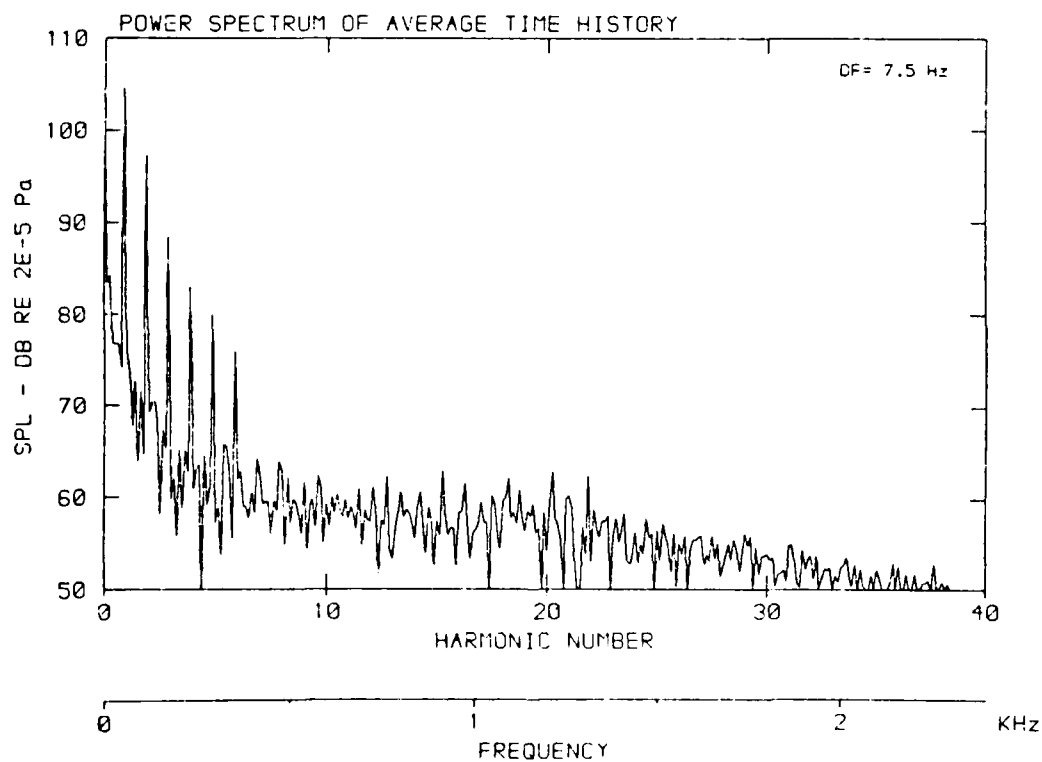
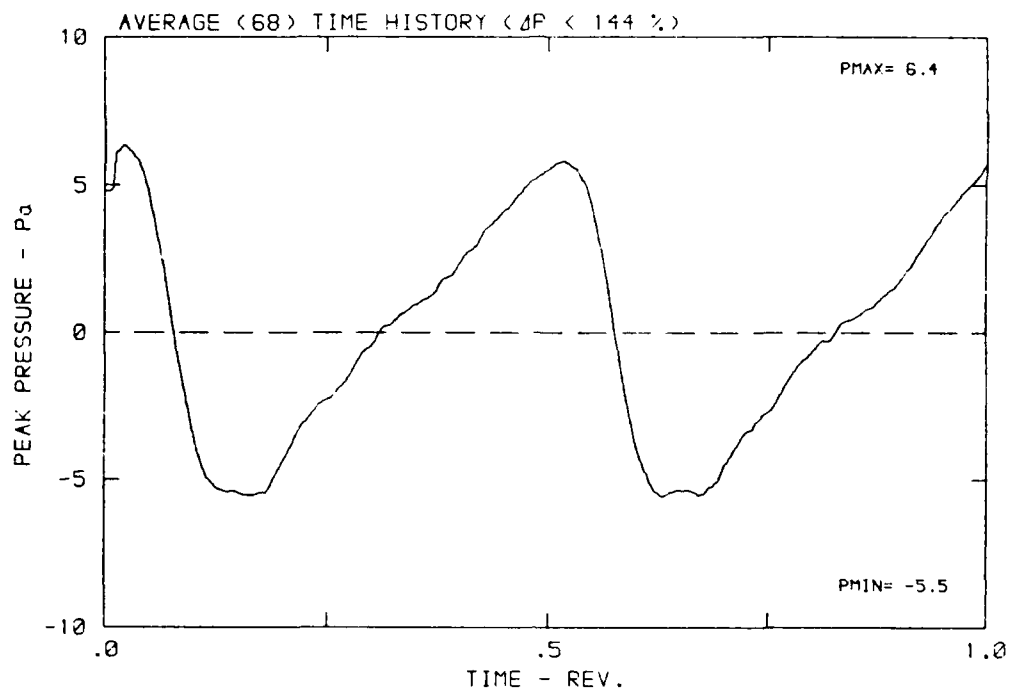
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β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7



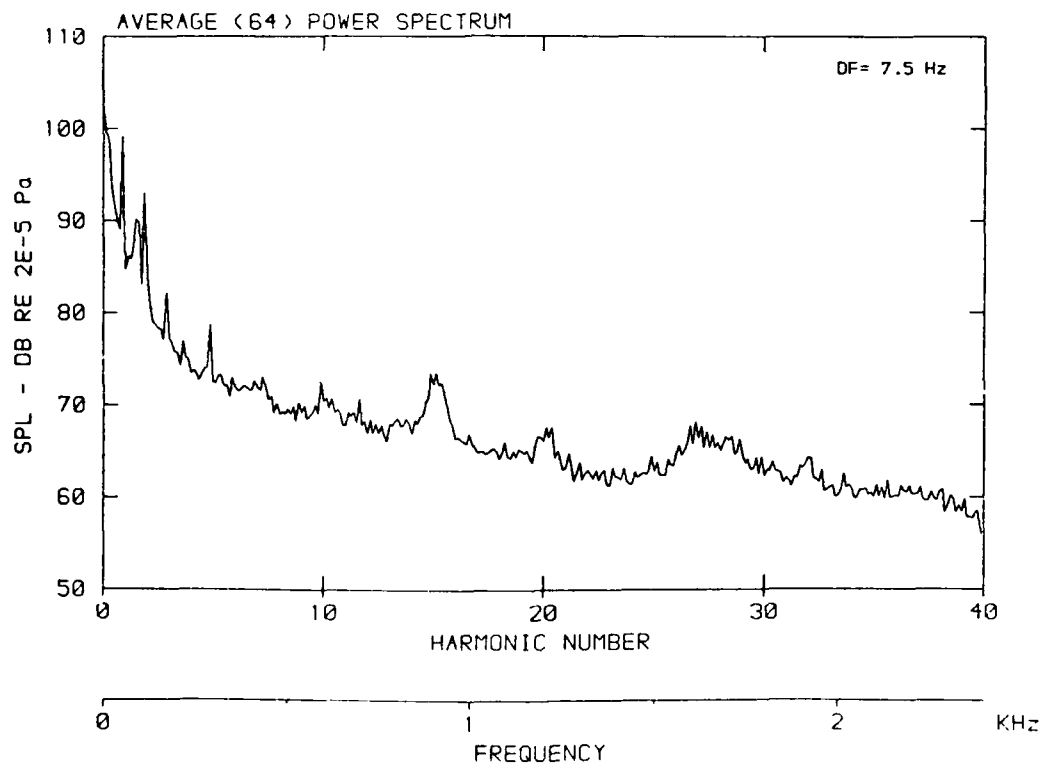
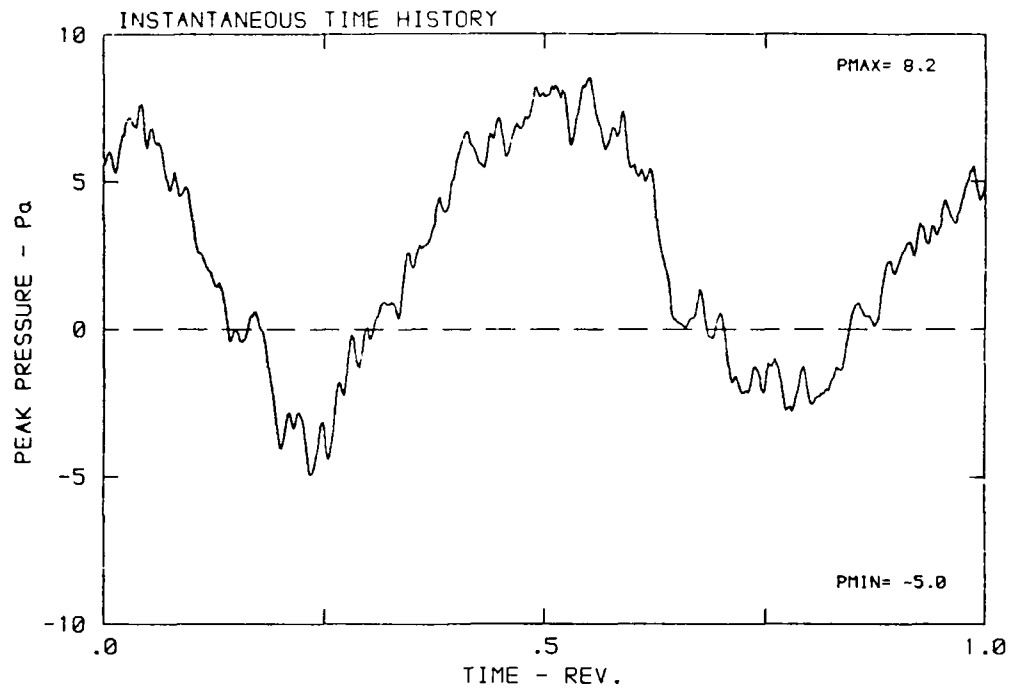
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β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



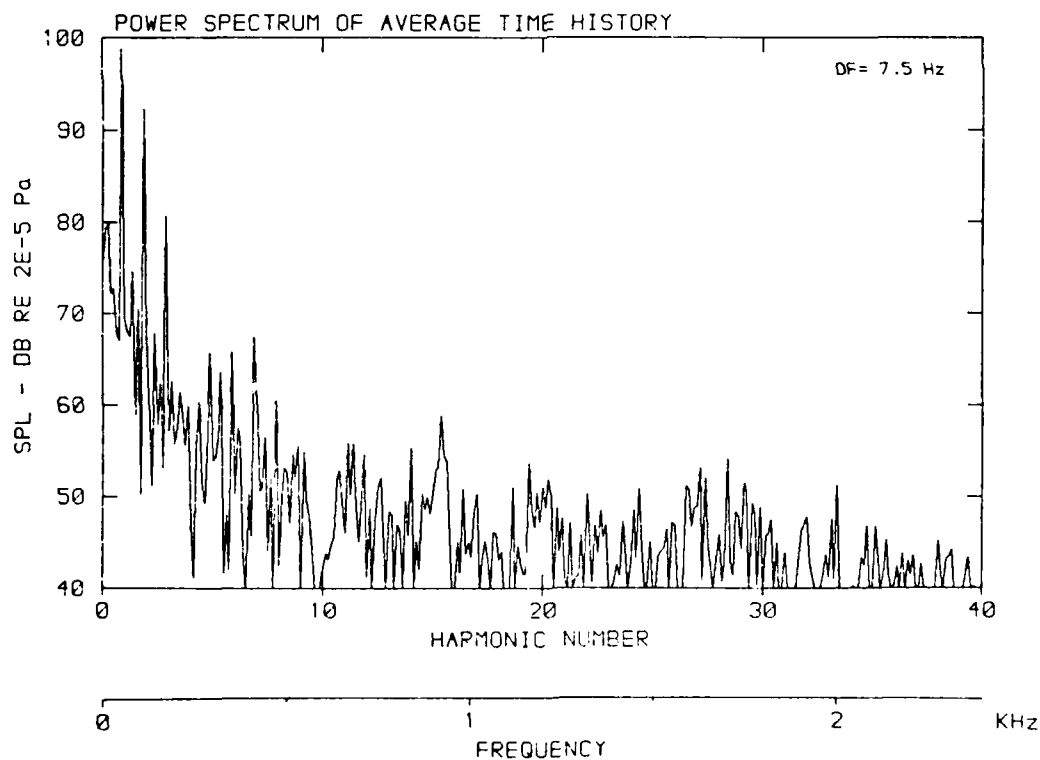
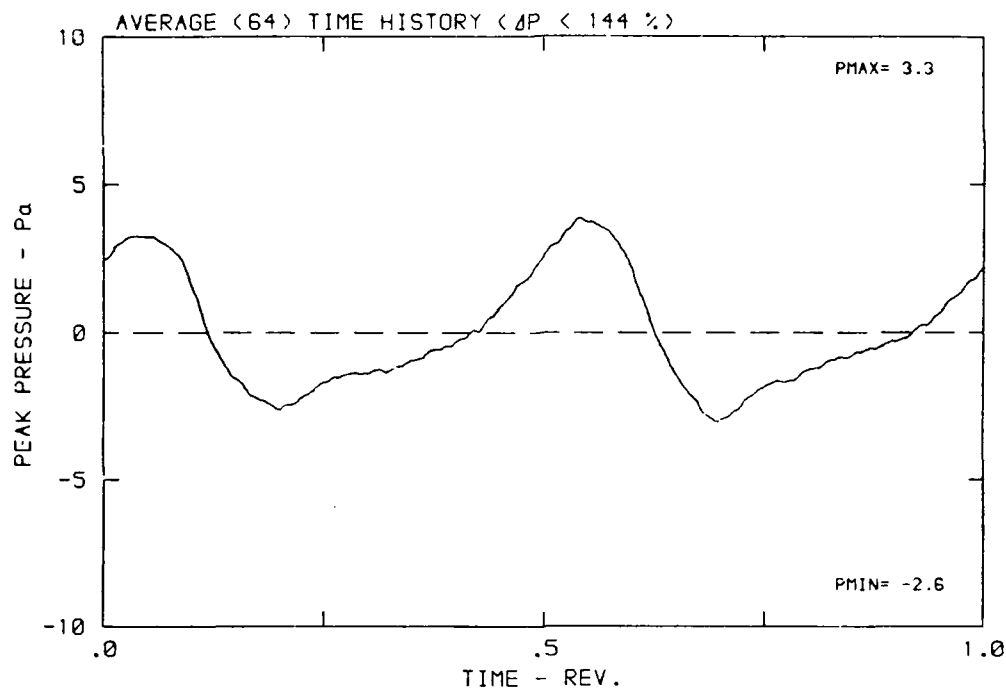
DATA POINT: LC-4 RUN: 136 MP: 7

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



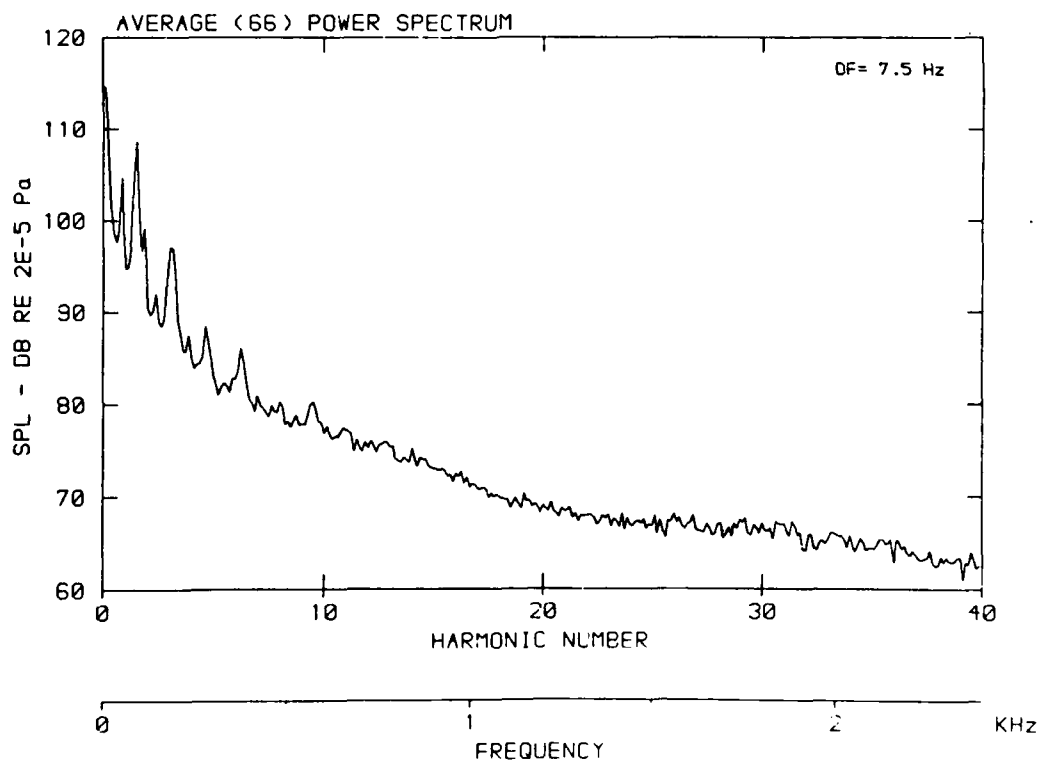
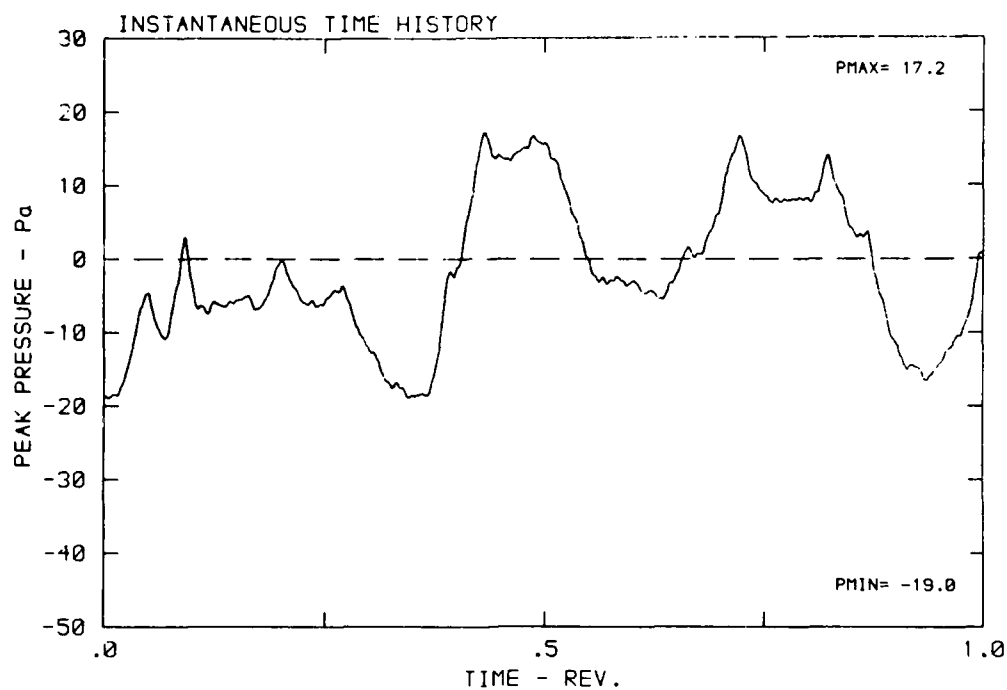
DATA POINT: LC-4 RUN: 136 MP: 7

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



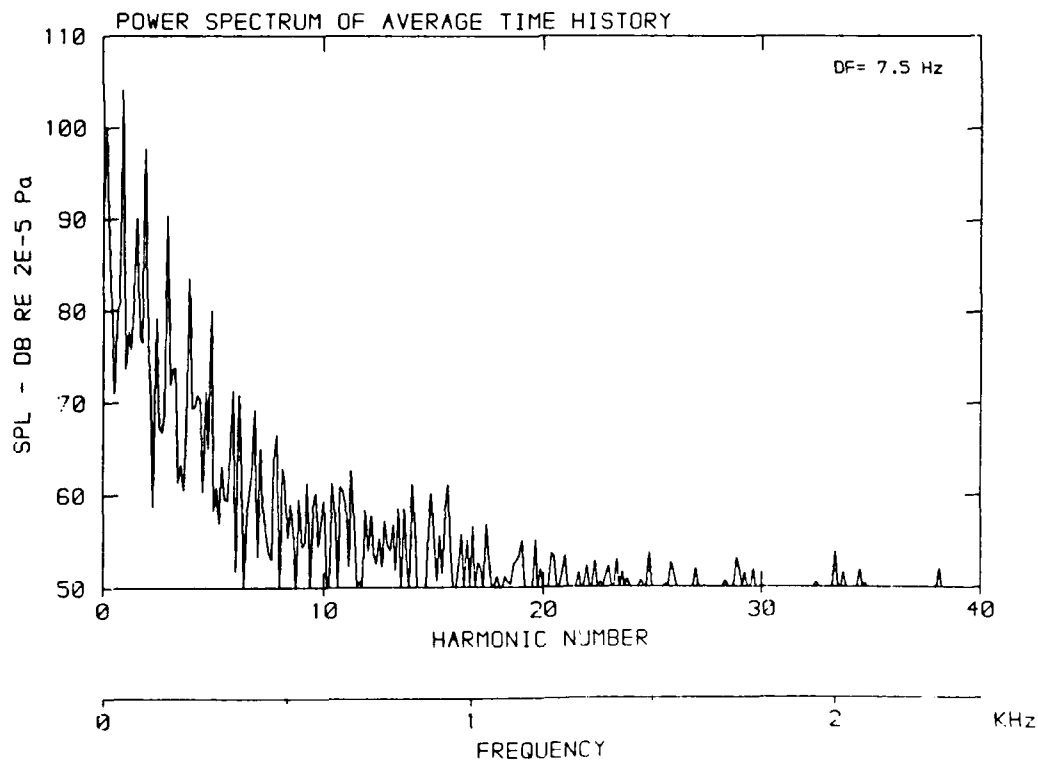
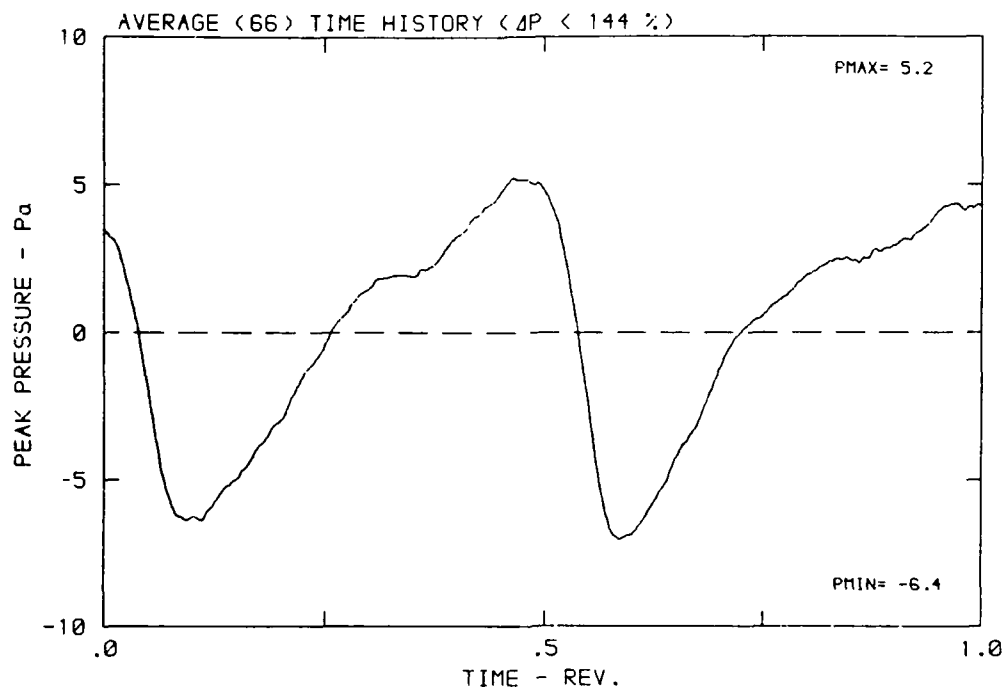
DATA POINT: LC-4 RUN: 136 MP: 8

μ : 24.4° MH: .5840 n: 1800 rpm v/u : .267 ϕ : -3.8° T: 286.7 K



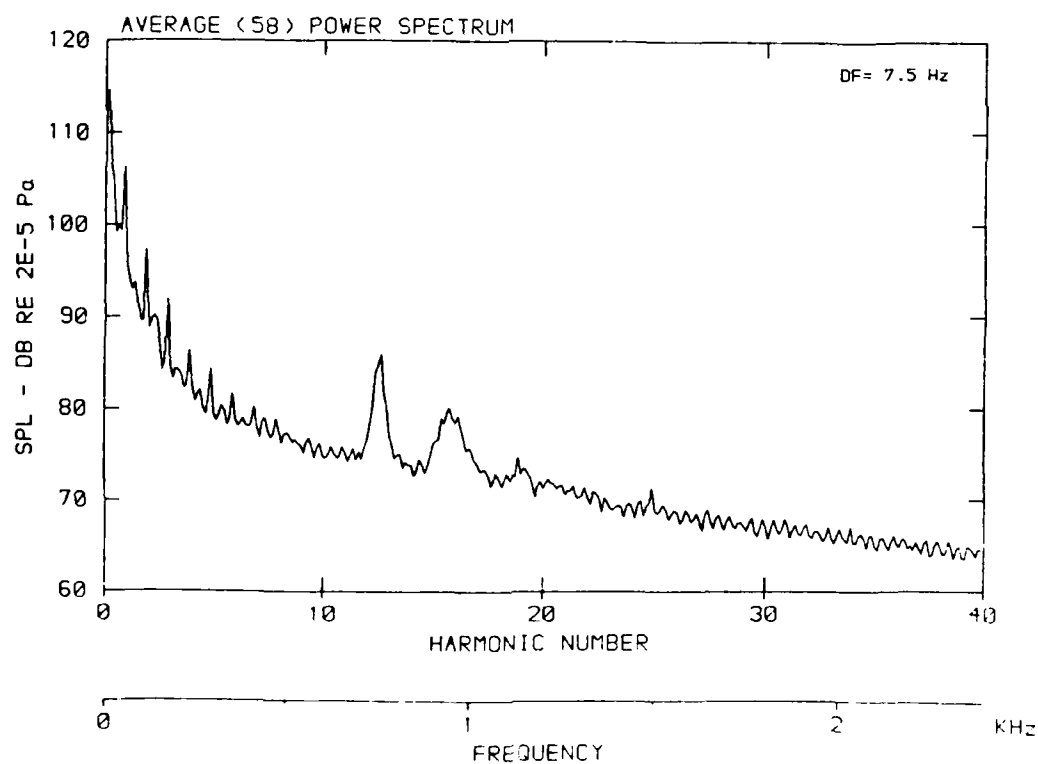
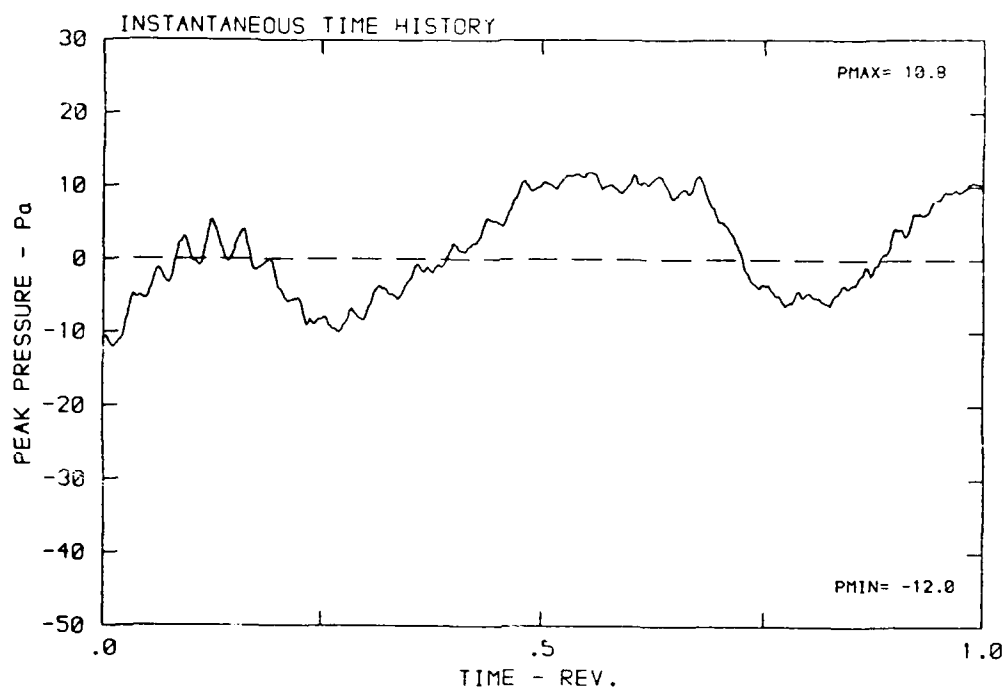
DATA POINT: LC-4 RUN: 136 MP: 8

β : 24.4° MH: .5840 n: 1800 rpm v/u: .267 ϕ : -3.8° T: 286.7 K



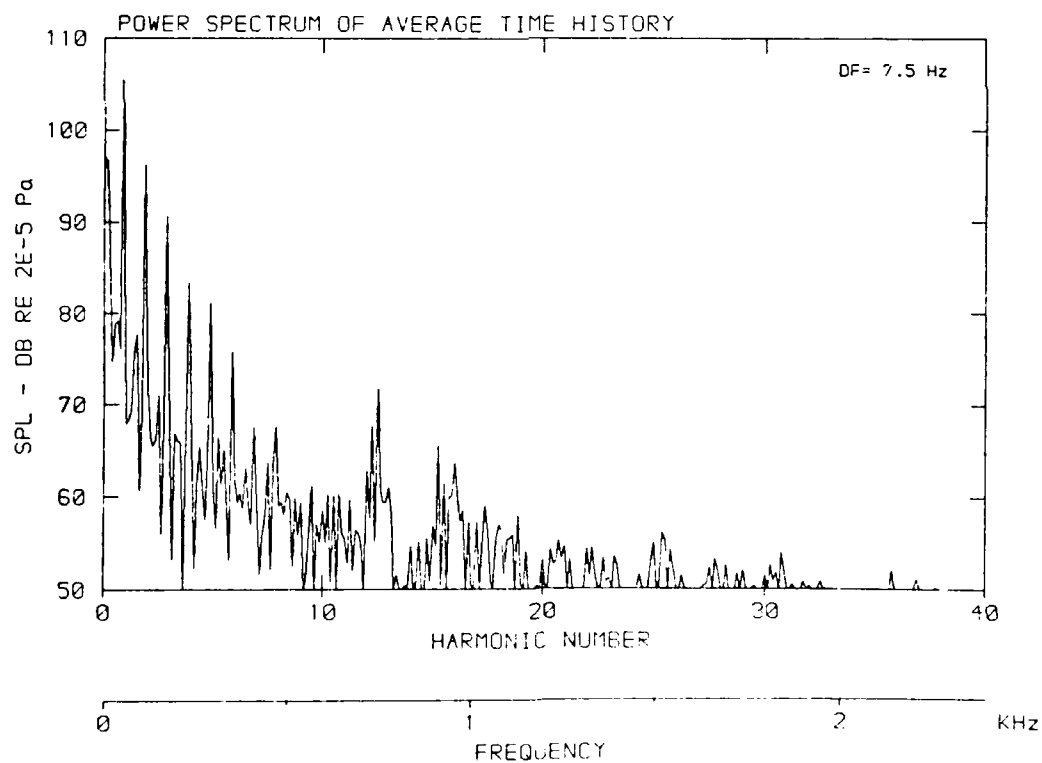
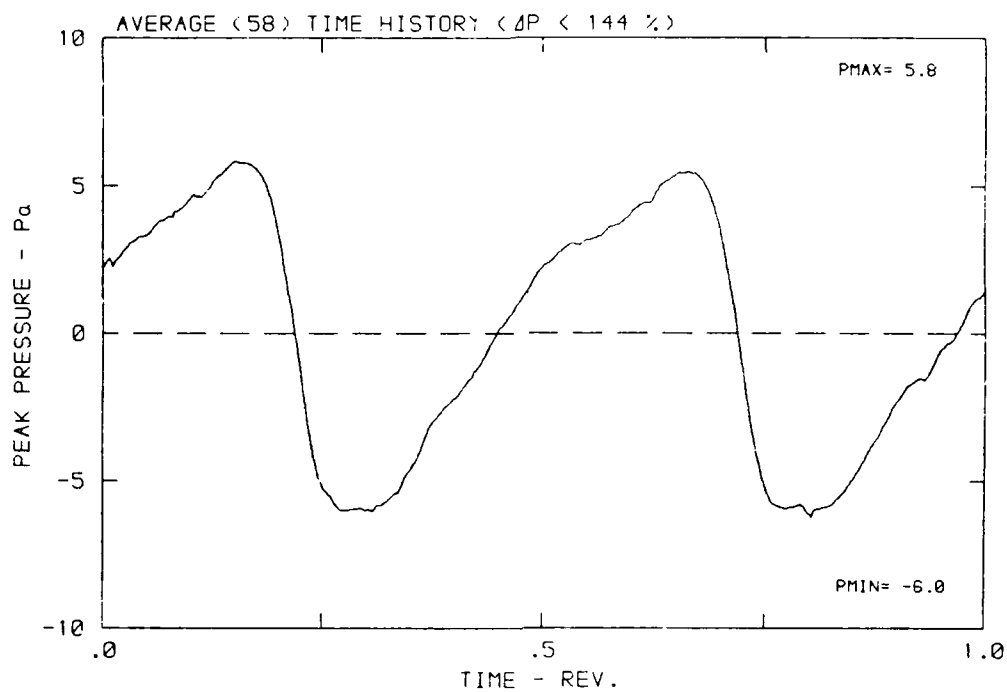
DATA POINT: LC-4 RUN: 136 MP: 9

β : 24.4° MH: .5840 n: 1800 rpm v/u : .267 ϕ : -3.8° T: 286.7 K

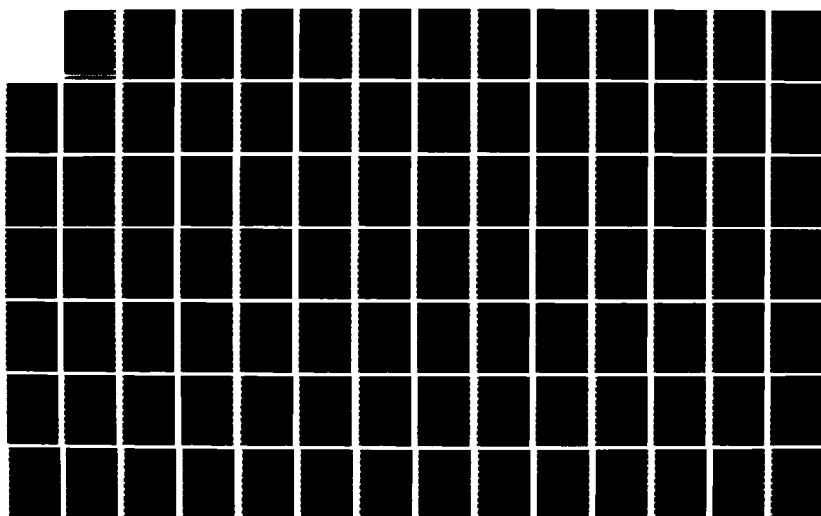


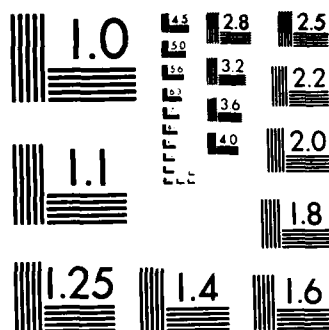
DATA POINT: LC-4 RUN: 136 MP: 9

β : 24.4° MH: .5840 n: 1800 rpm v/u : .267 ϕ : -3.8° T: 286.7 K



AD-A174 981 DFVLR/FRA (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER LUFT UND RAUMFAHR (U) DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMF 3/6
UNCLASSIFIED W M DOBRZYNSKI ET AL 1986 F/G 20/1 NL

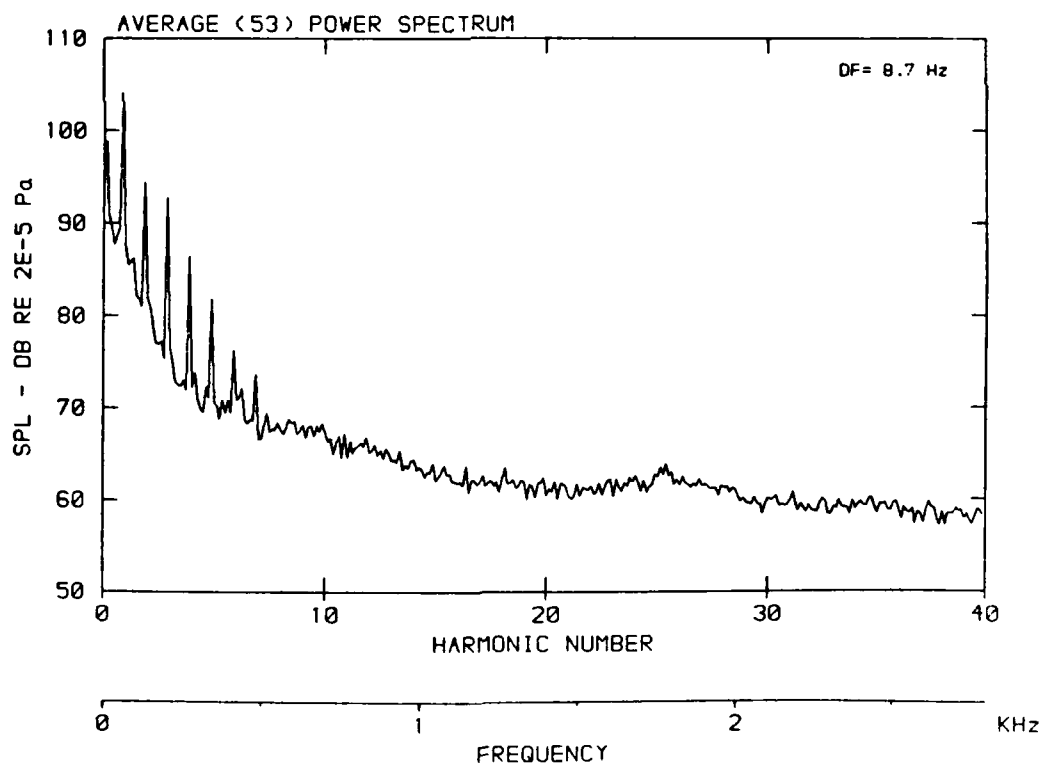
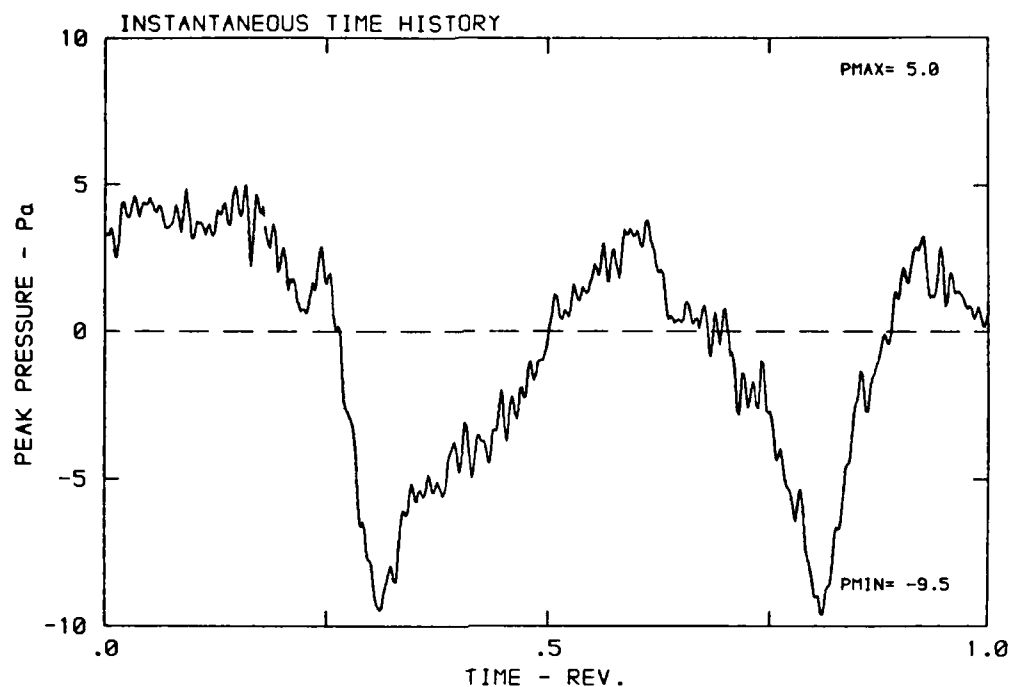




MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

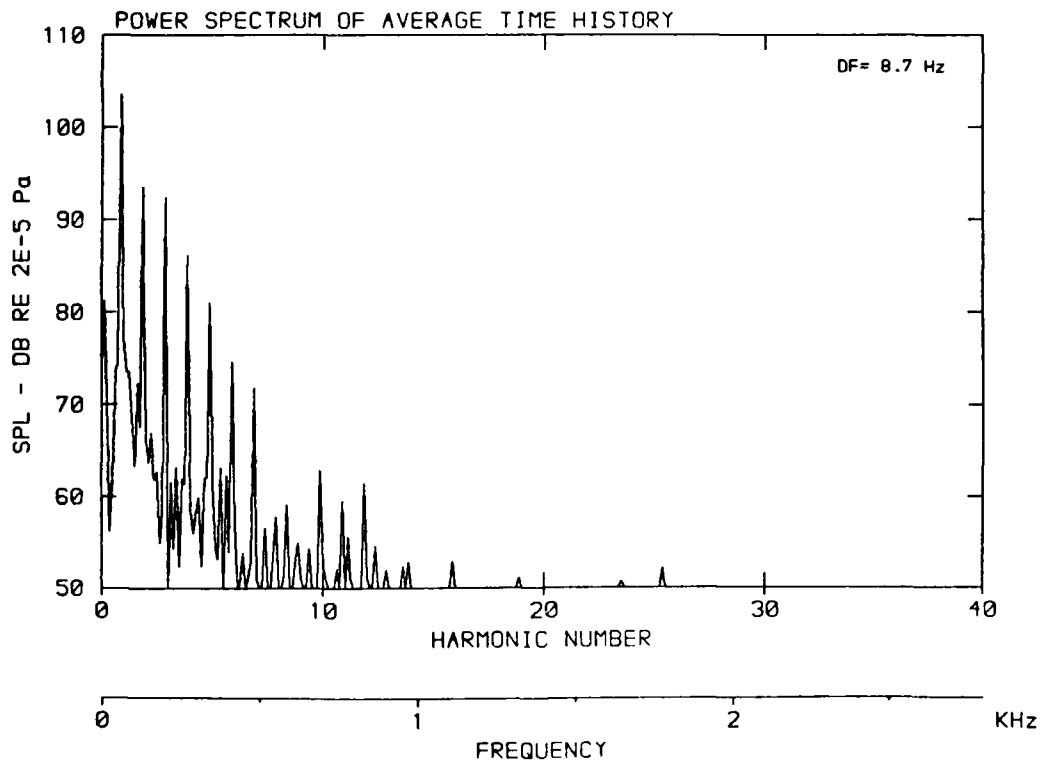
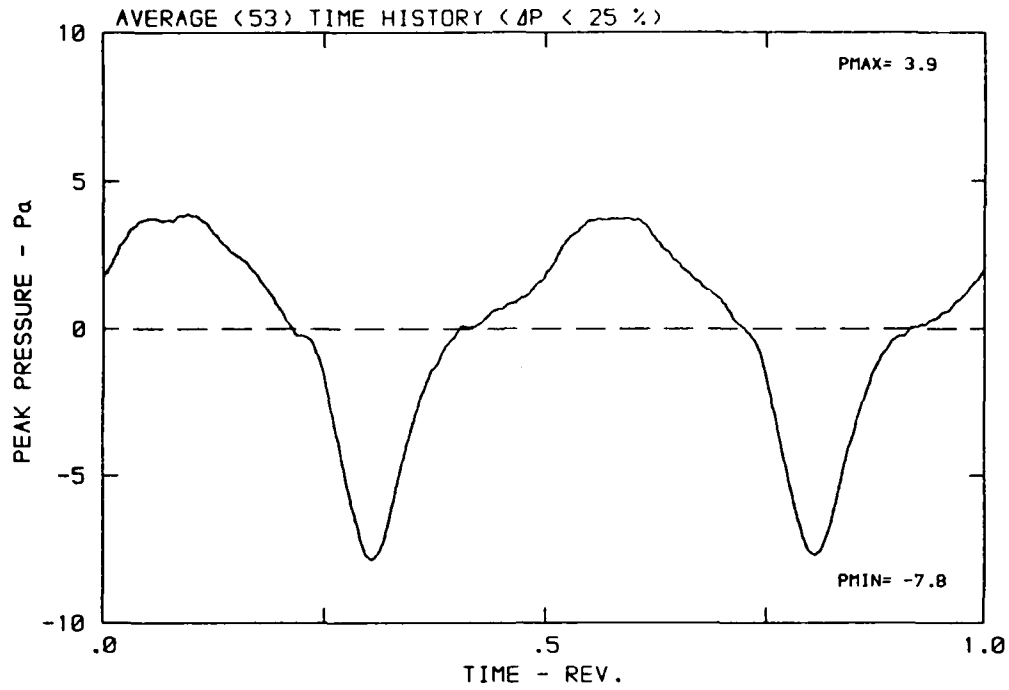
DATA POINT: LC-5 RUN: 137 MP: 1

β : 24.4° MH: .6750 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 287.0 K



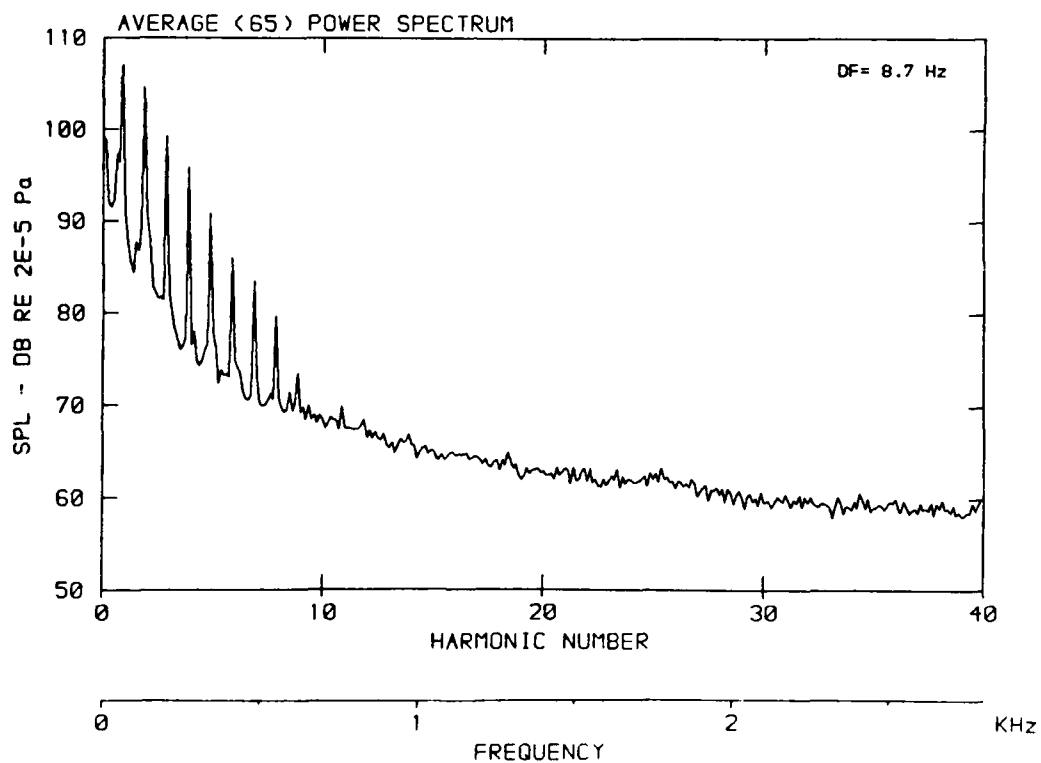
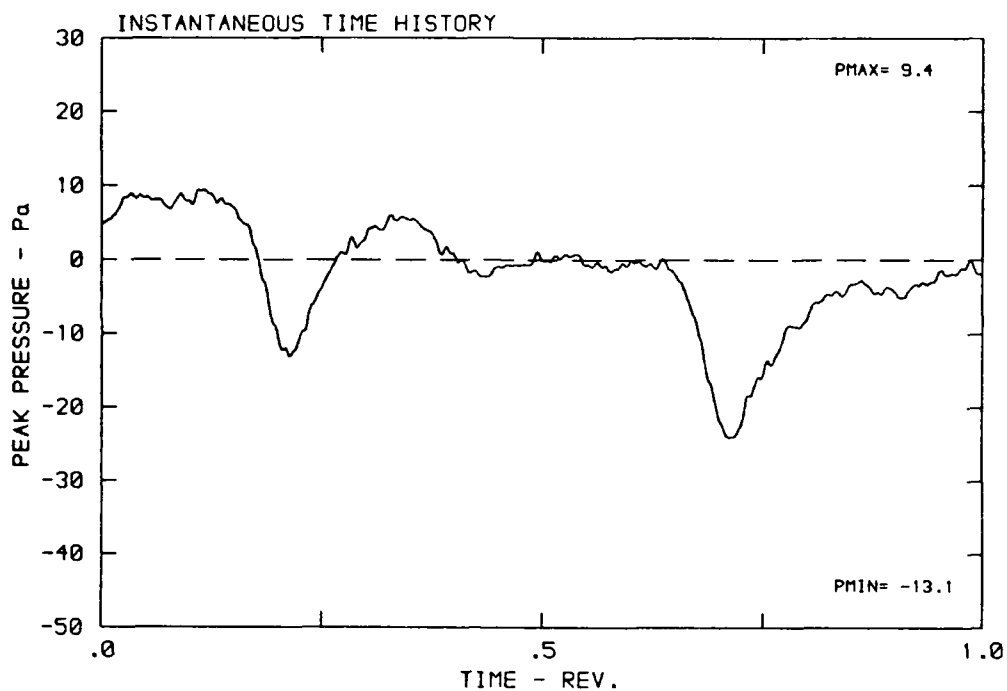
DATA POINT: LC-5 RUN: 137 MP: 1

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



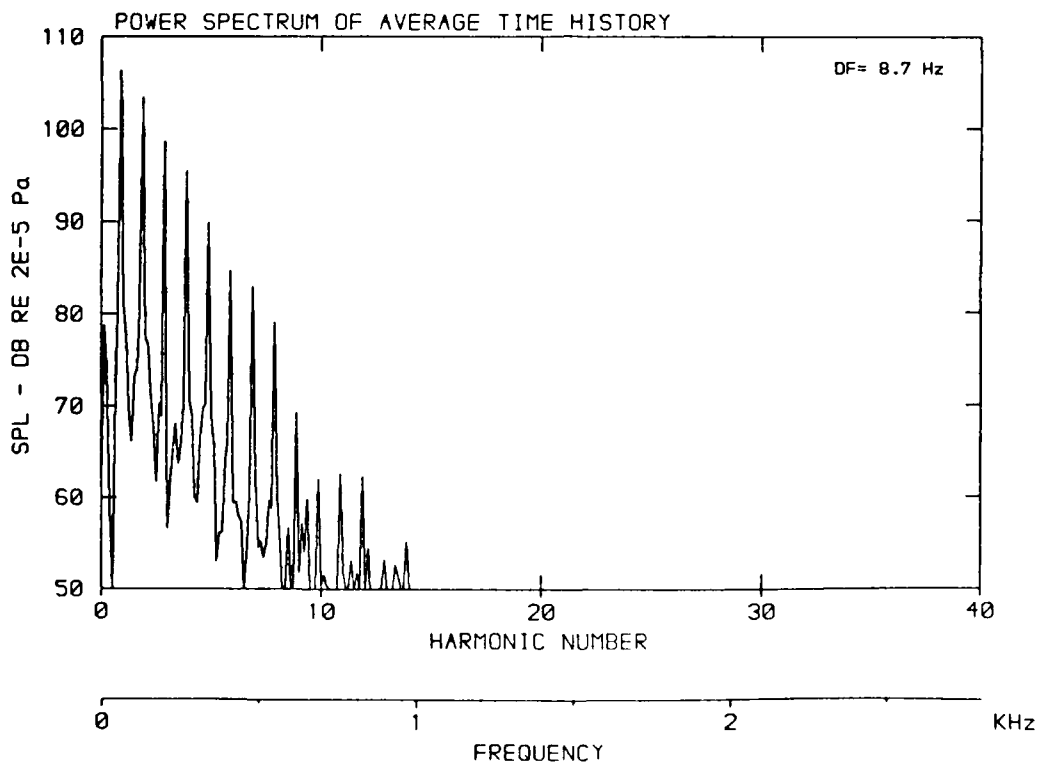
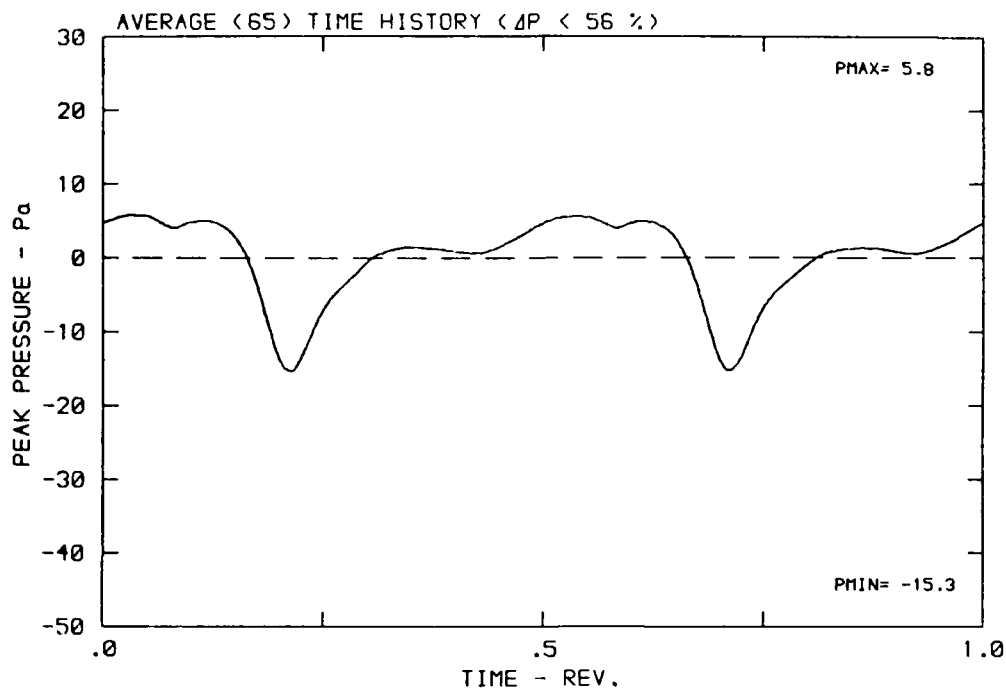
DATA POINT: LC-5 RUN: 137 MP: 2

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



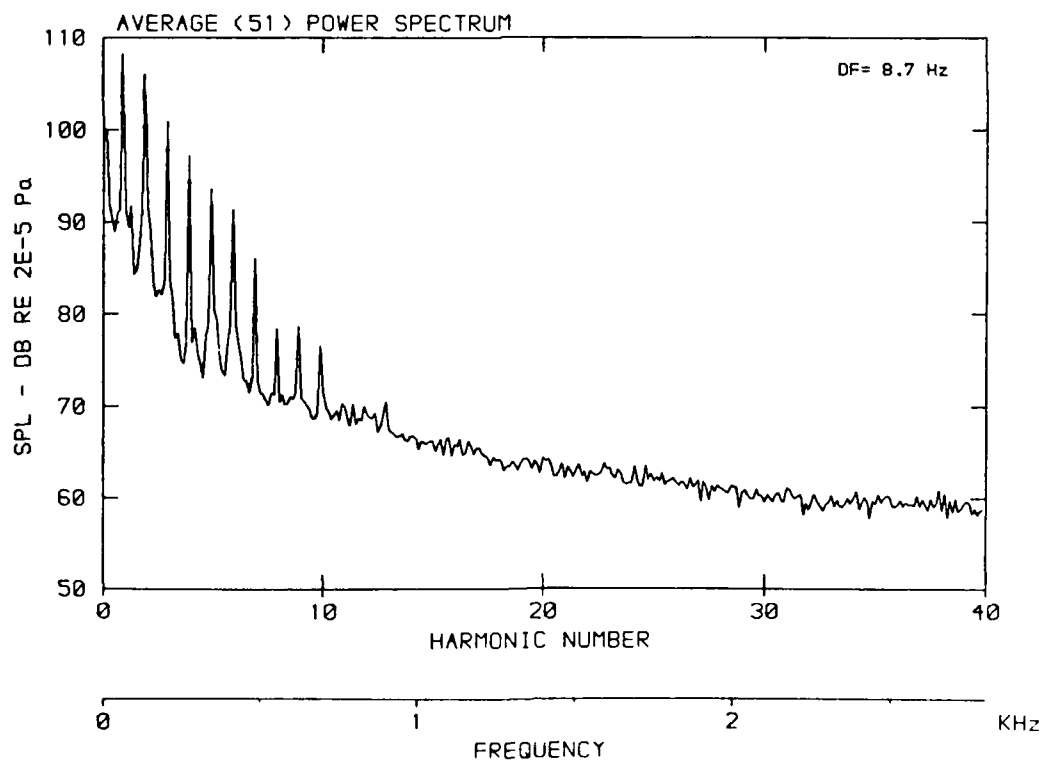
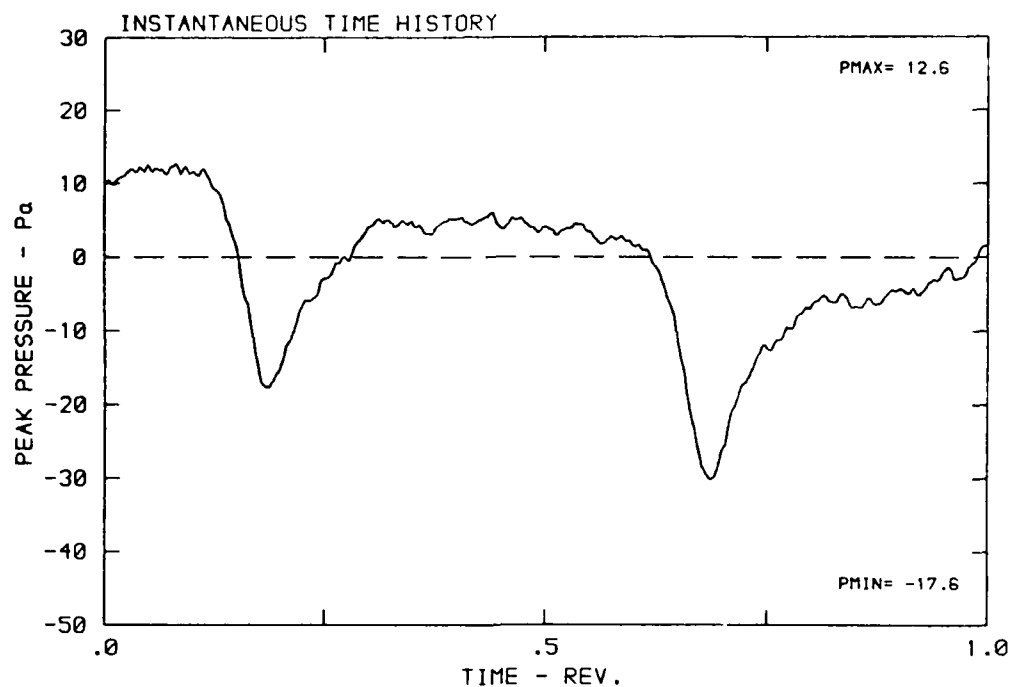
DATA POINT: LC-5 RUN: 137 MP: 2

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



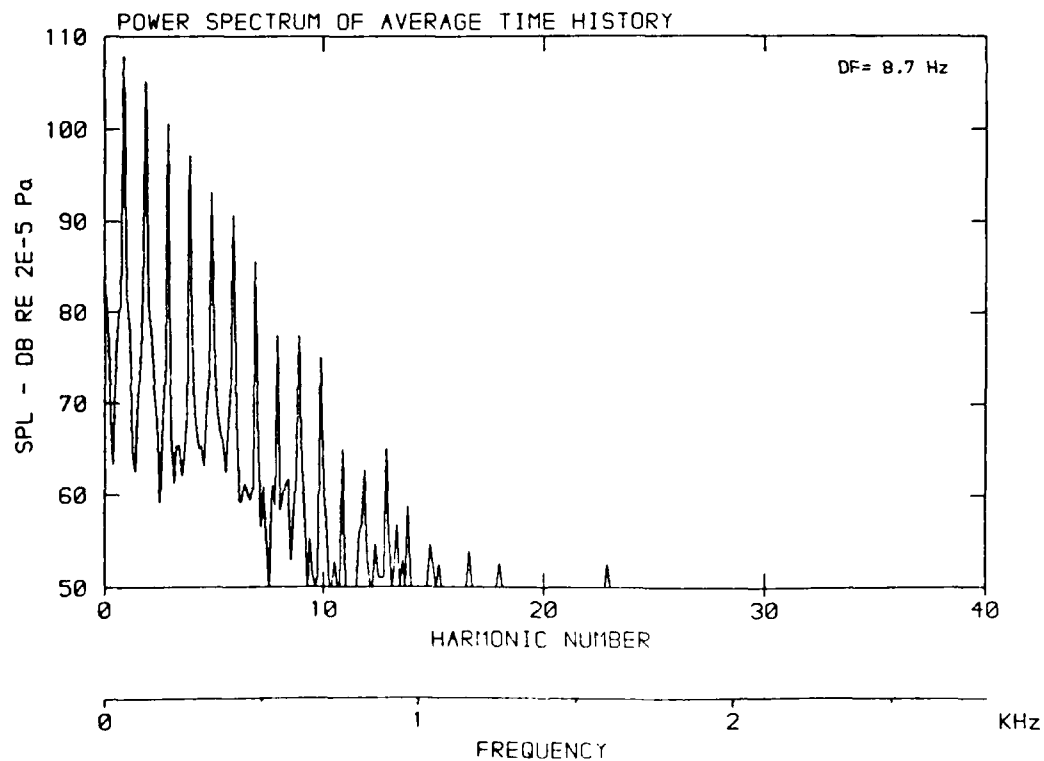
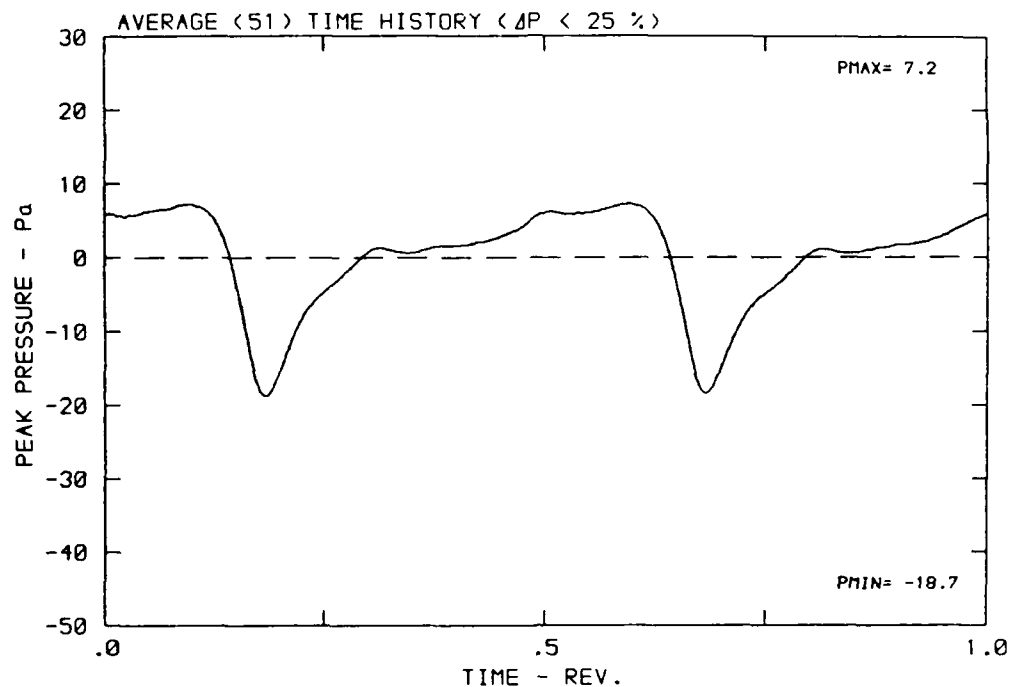
DATA POINT: LC-5 RUN: 137 MP: 3

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



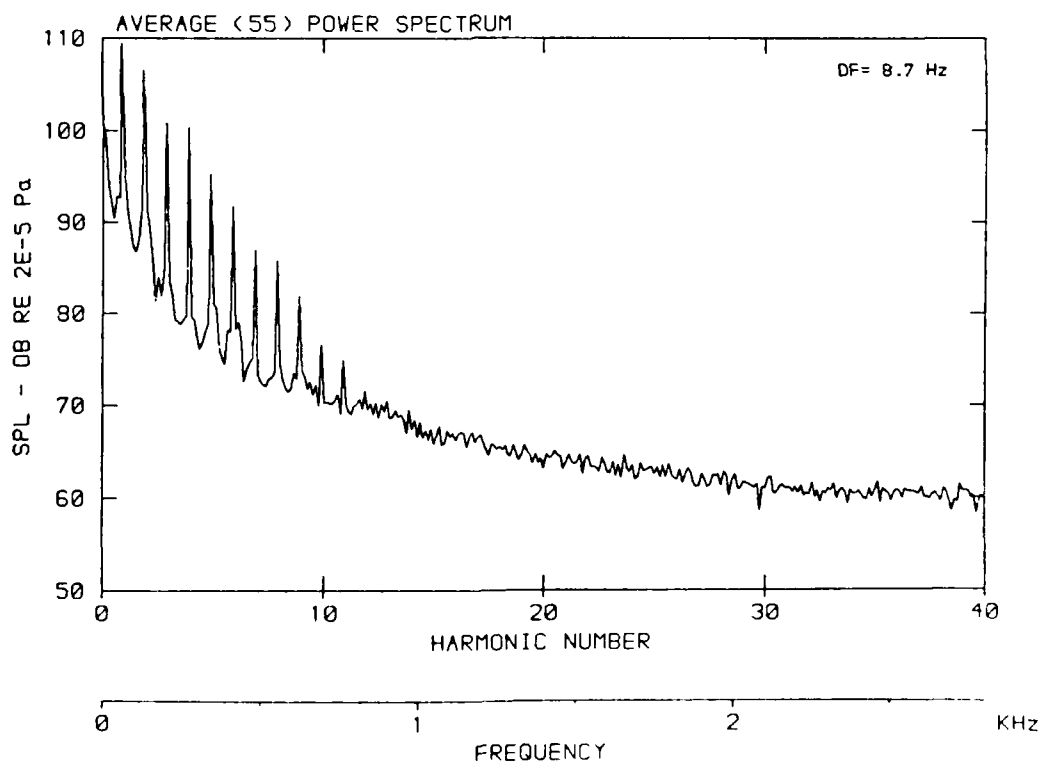
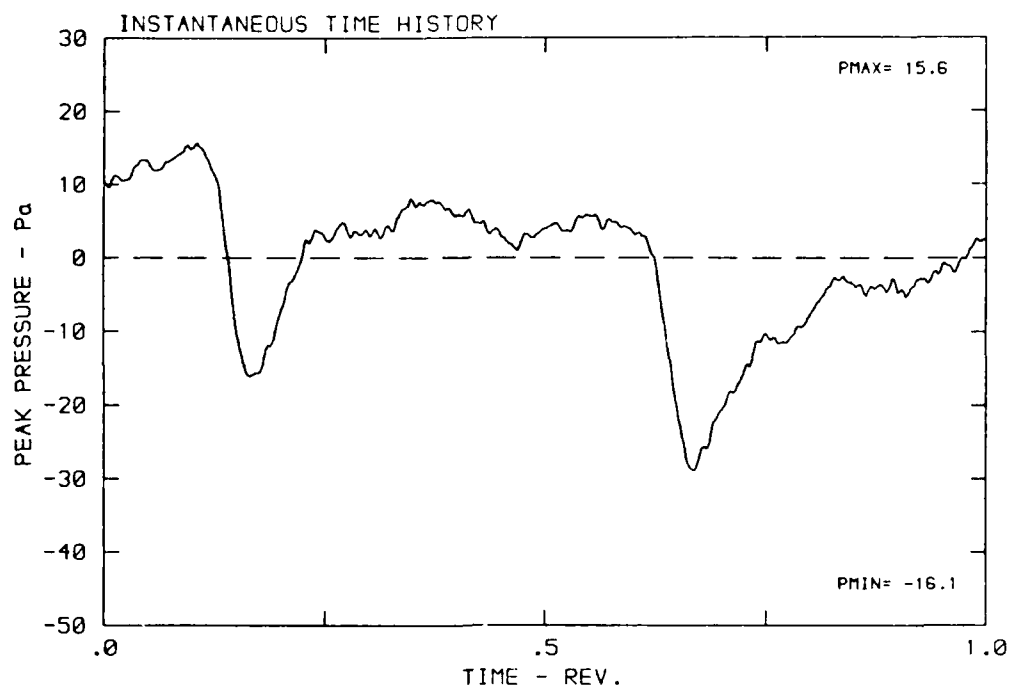
DATA POINT: LC-5 RUN: 137 MP: 3

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



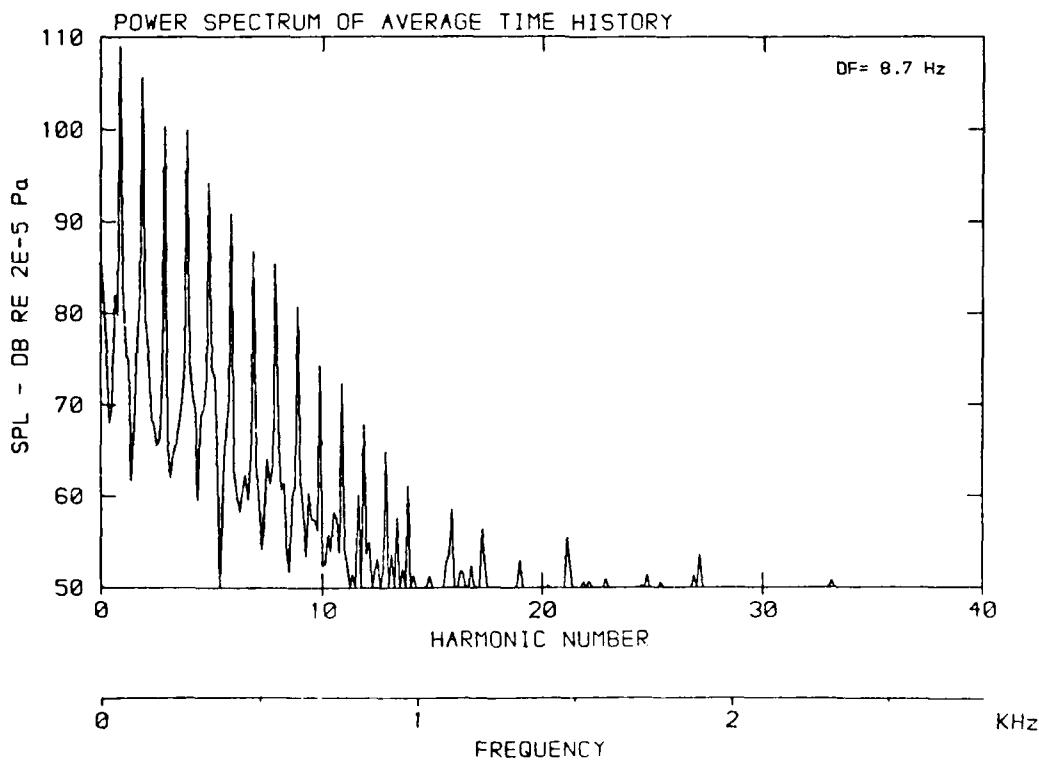
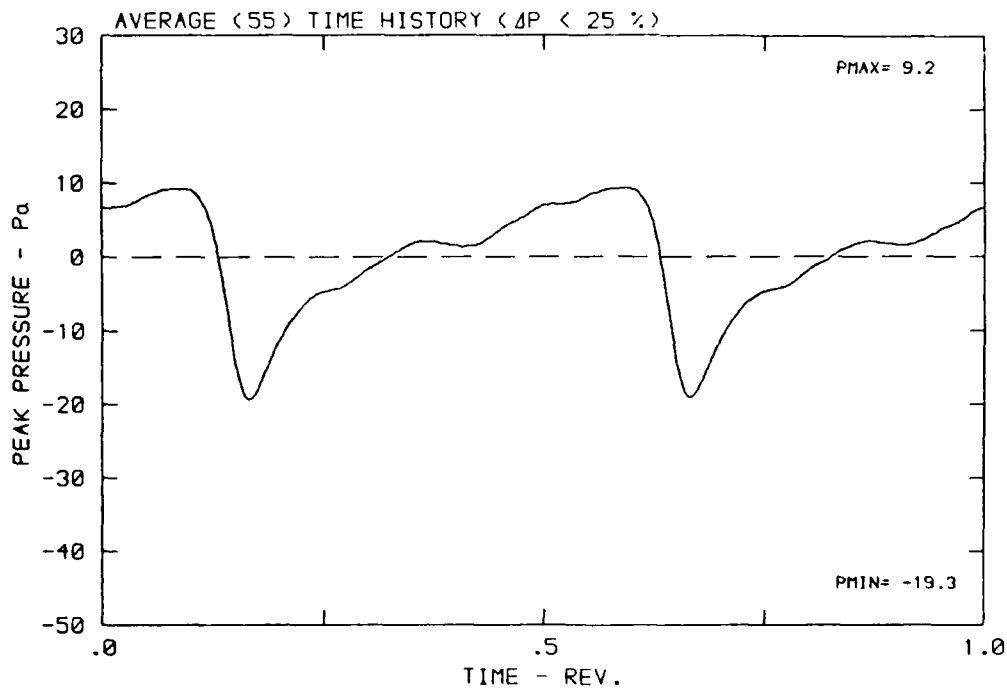
DATA POINT: LC-5 RUN: 137 MP: 4

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



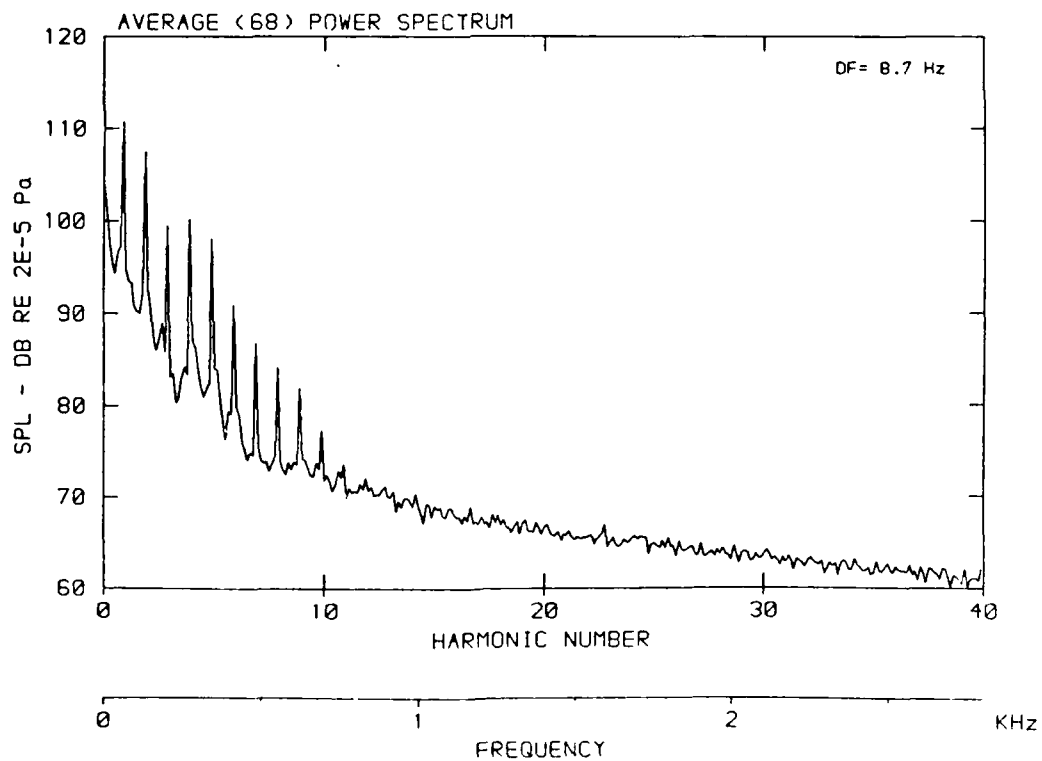
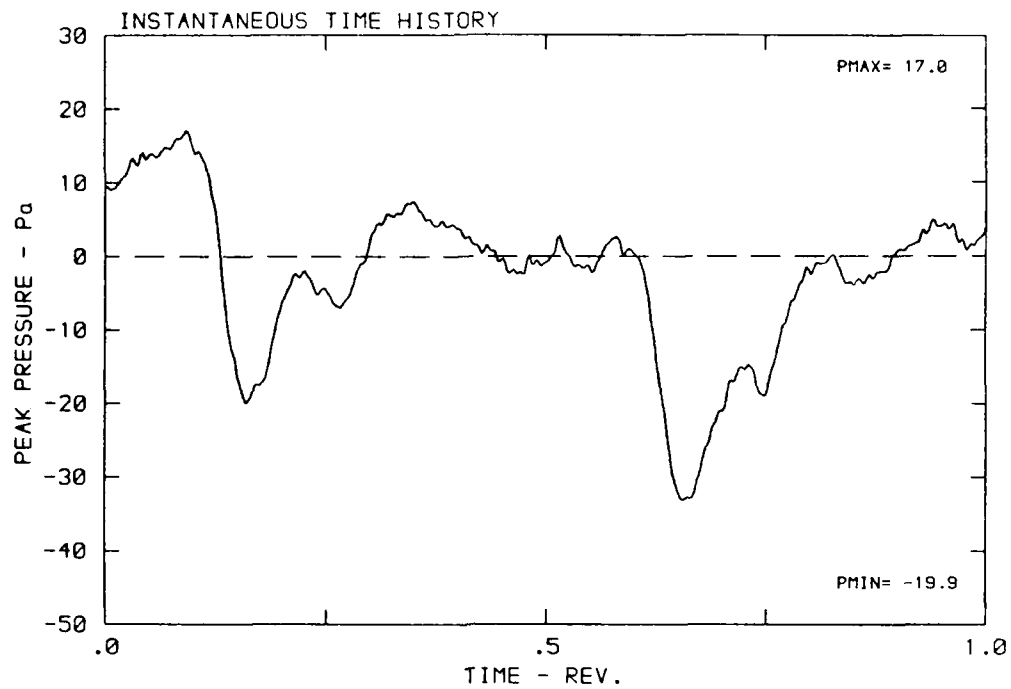
DATA POINT: LC-5 RUN: 137 MP: 4

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



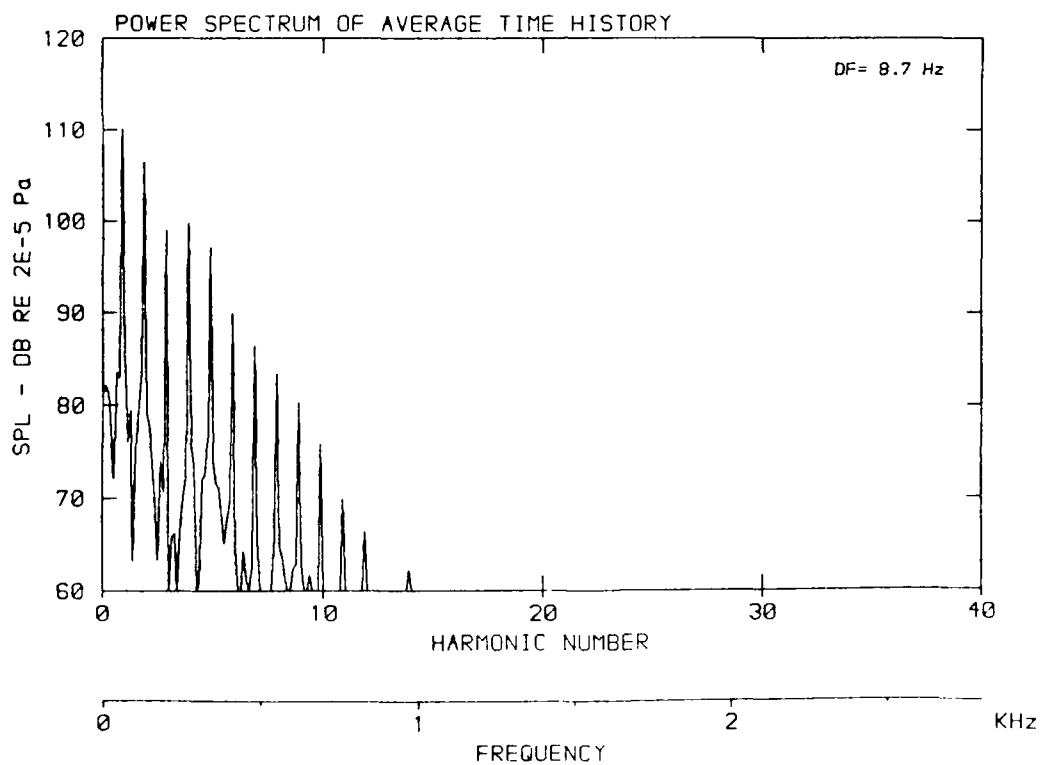
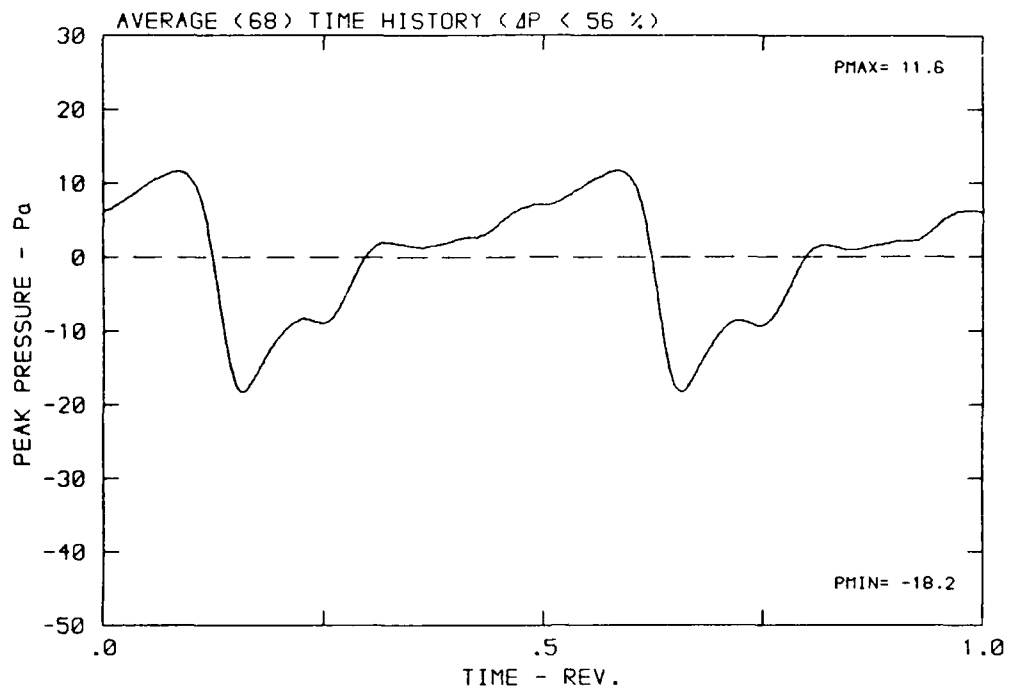
DATA POINT: LC-5 RUN: 137 MP: 5

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 267.0 K



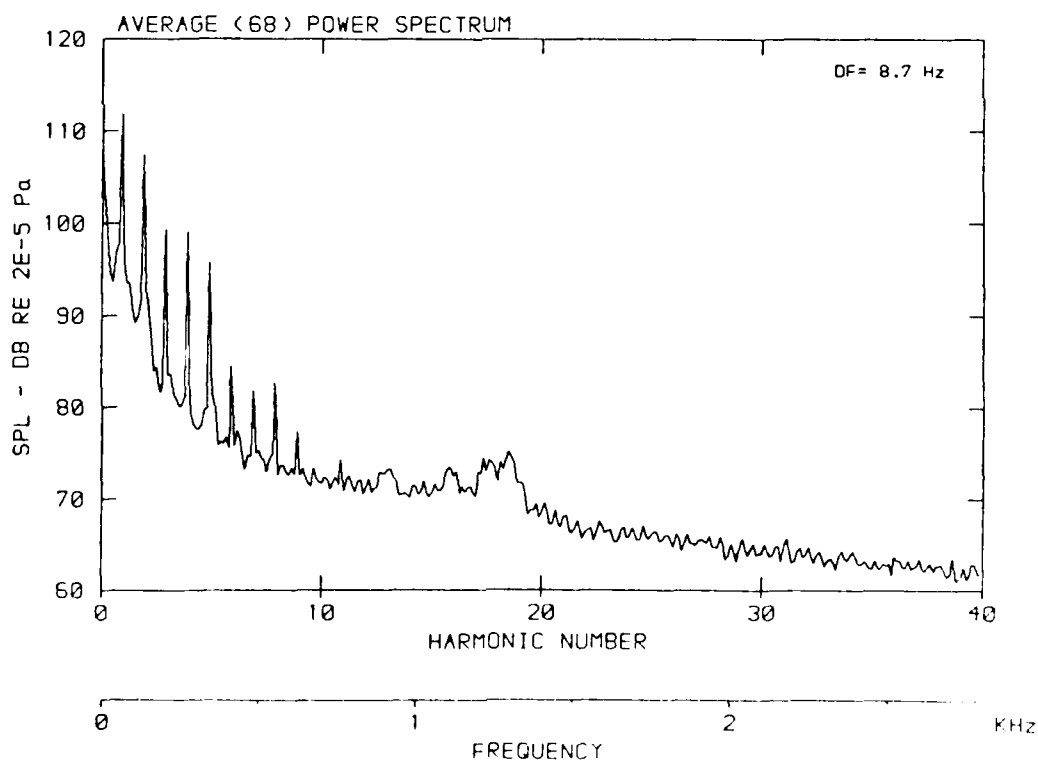
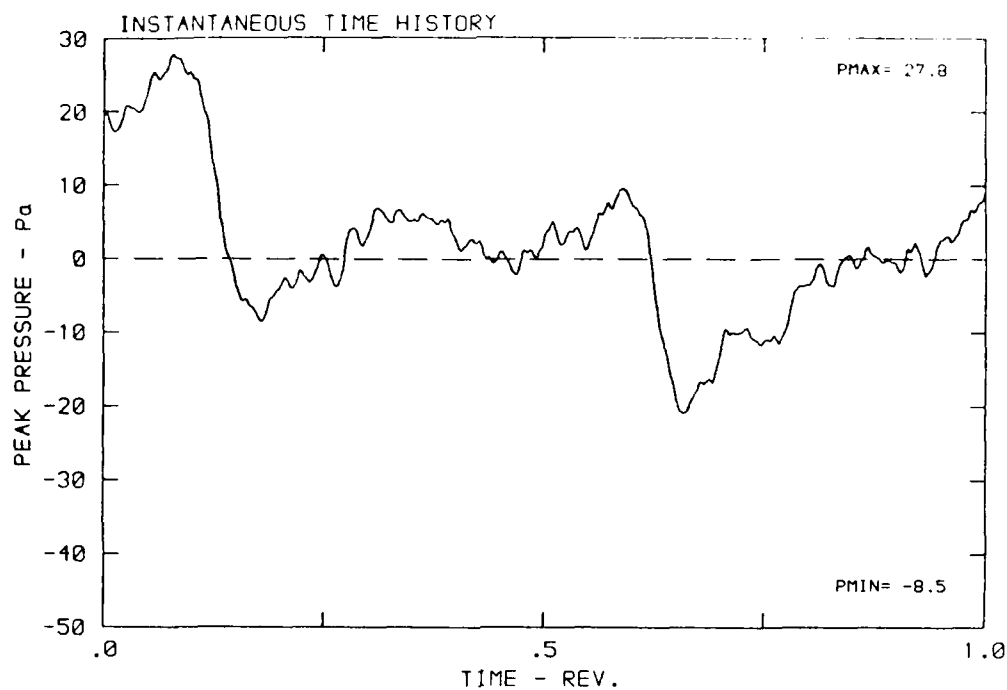
DATA POINT: LC-5 RUN: 137 MP: 5

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



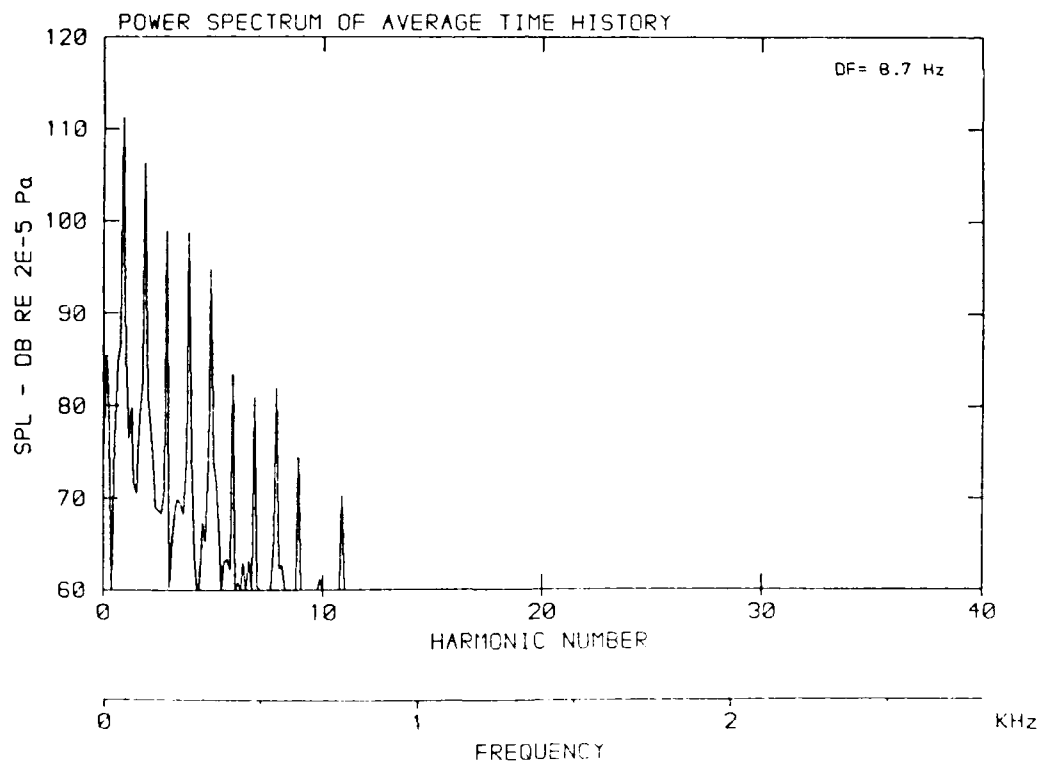
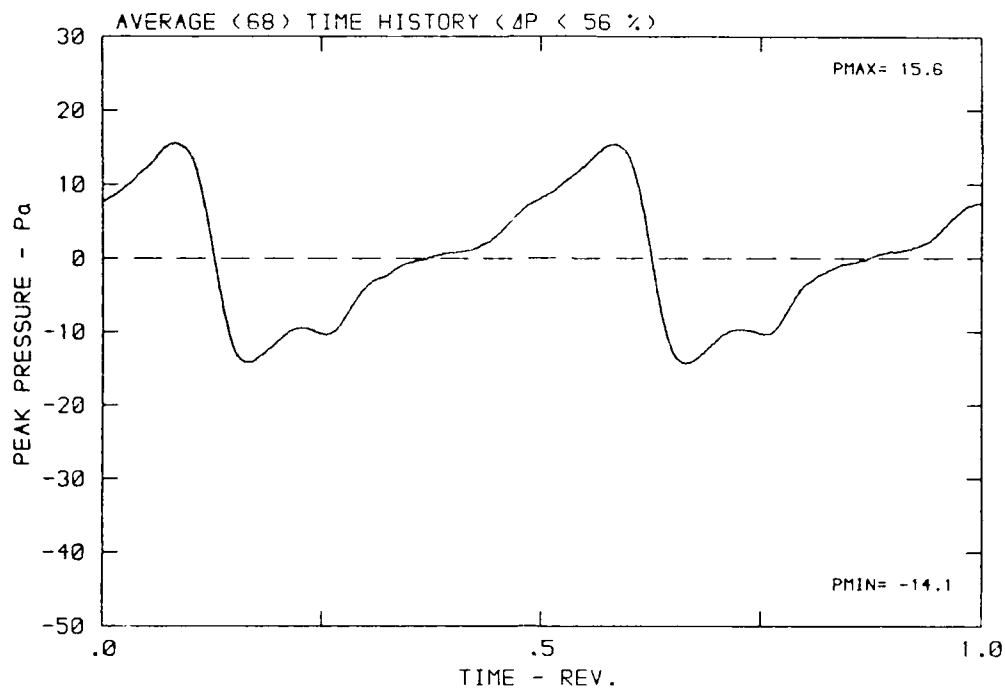
DATA POINT: LC-5 RUN: 137 MP: 6

β : 24.4° MH: .6750 n: 2100 rpm v/u : .238 ϕ : -3.6° T: 287.0



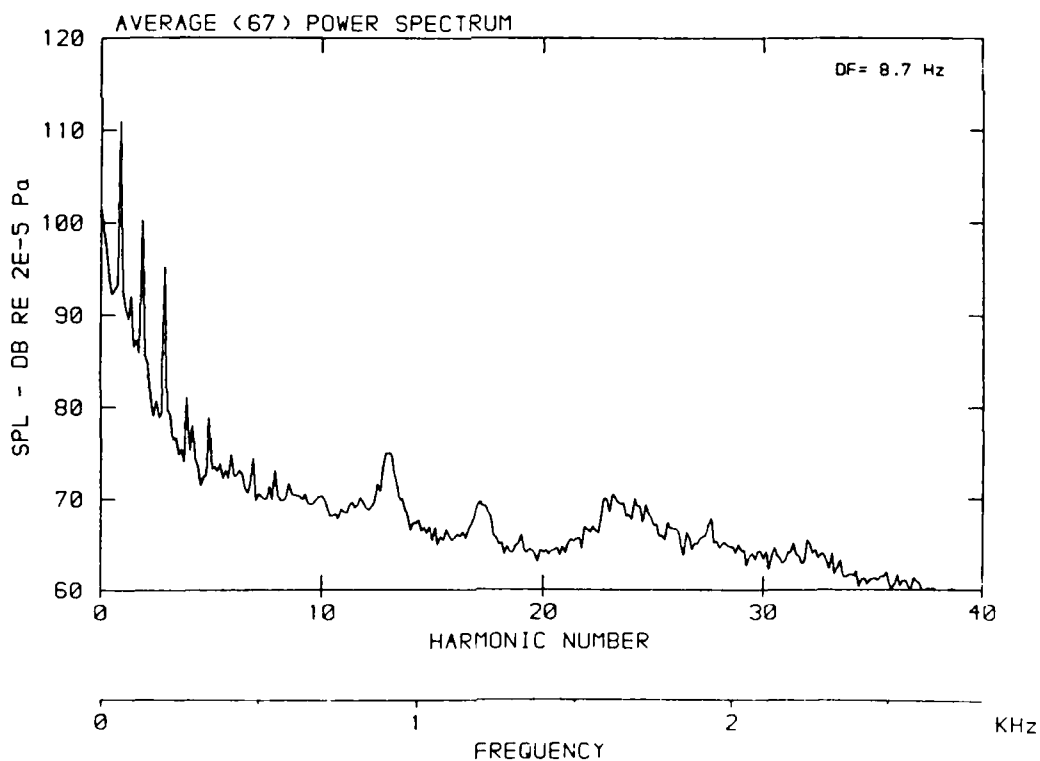
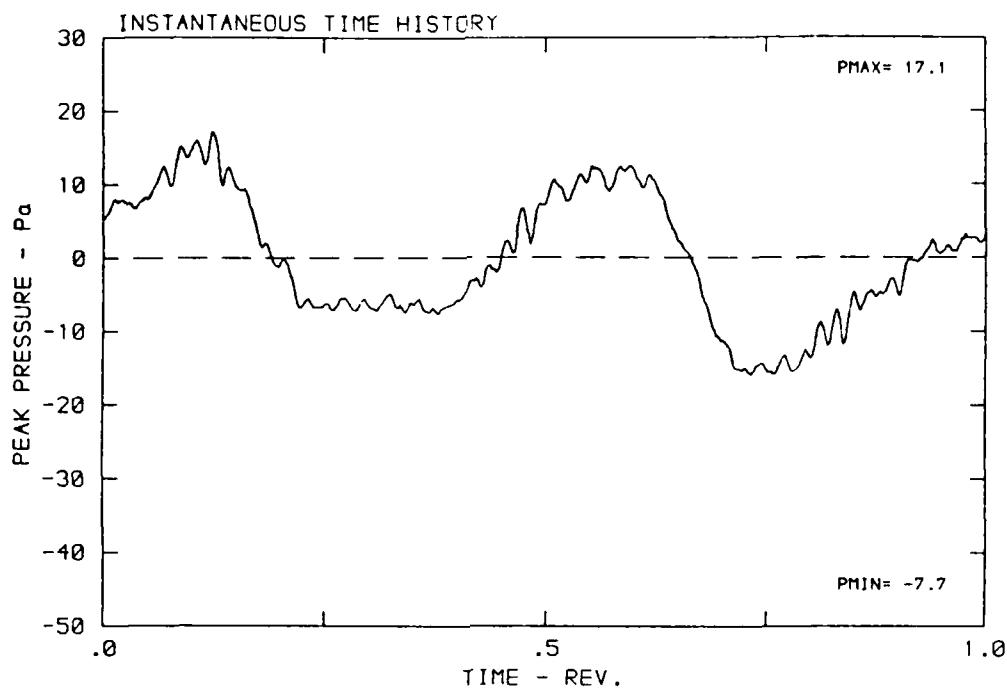
DATA POINT: LC-5 RUN: 137 MP: 6

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



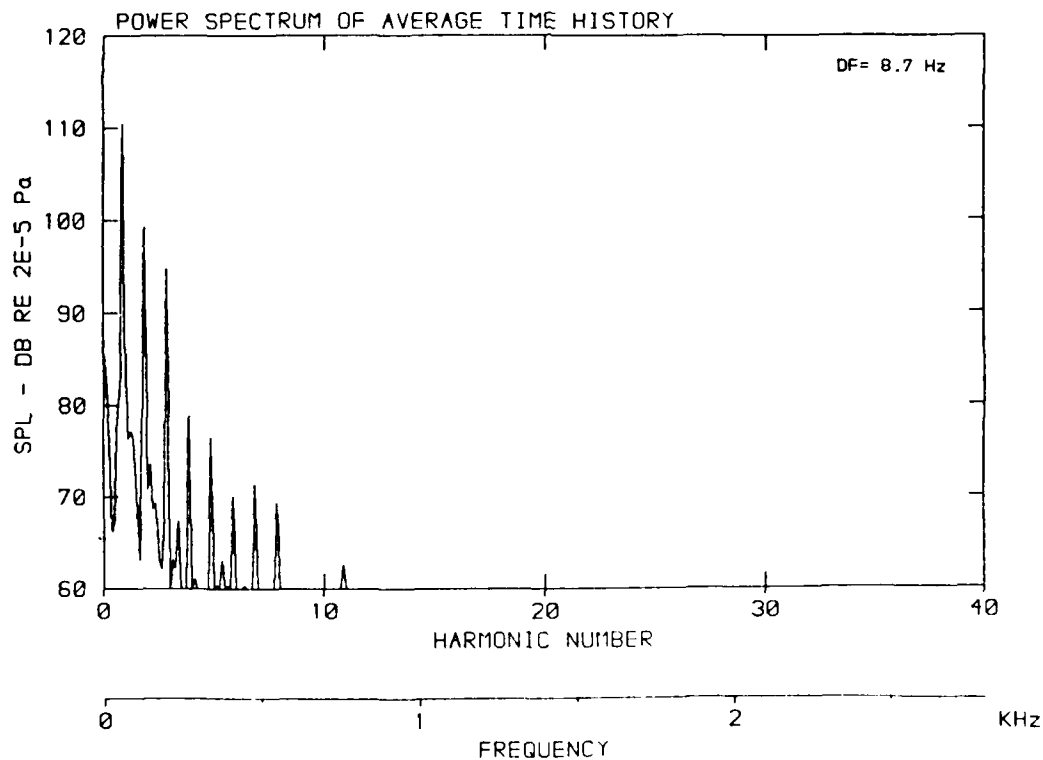
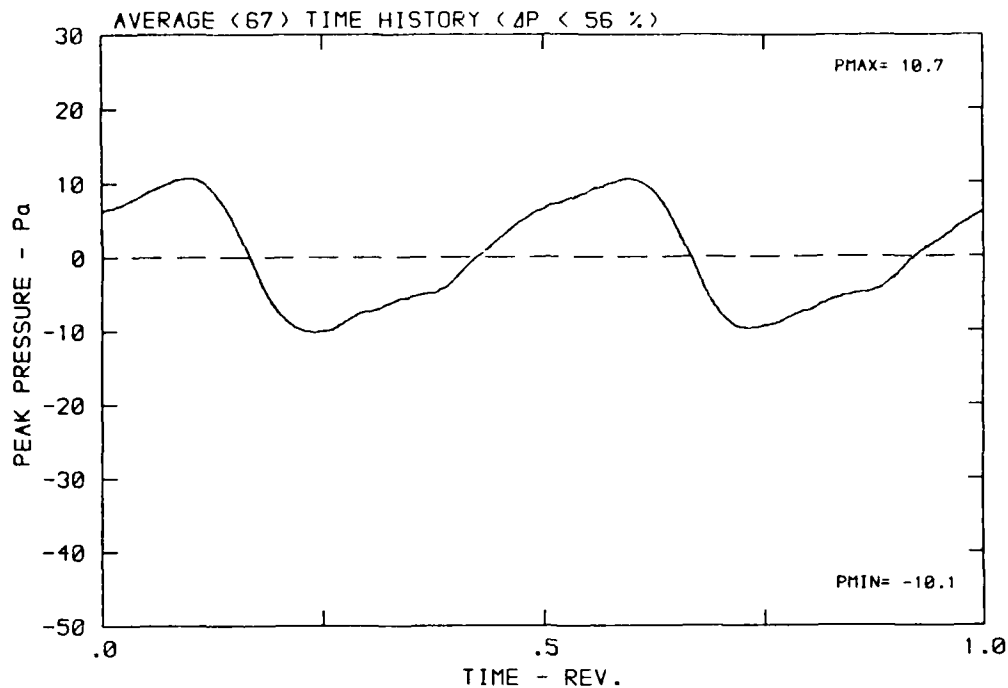
DATA POINT: LC-5 RUN: 137 MP: 7

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



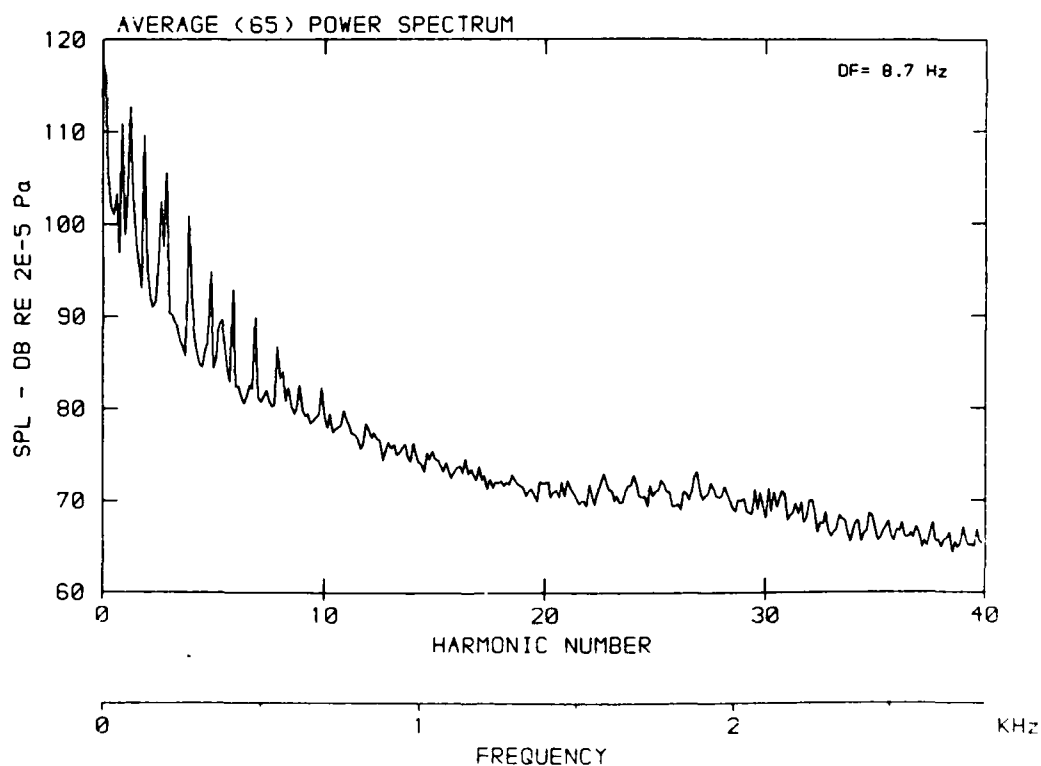
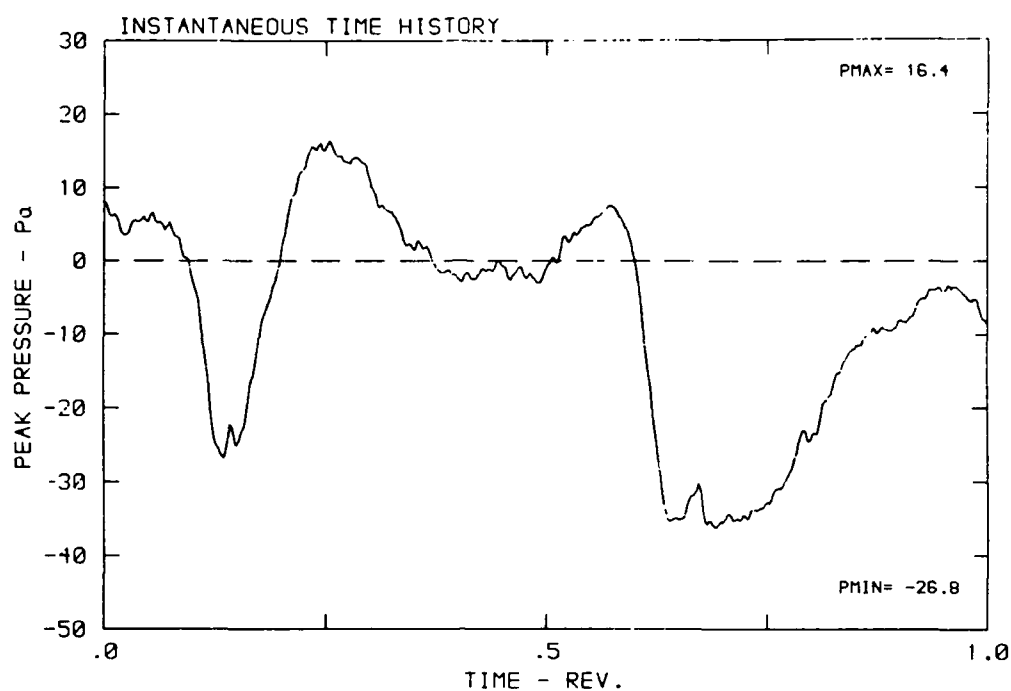
DATA POINT: LC-5 RUN: 137 MF: 7

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



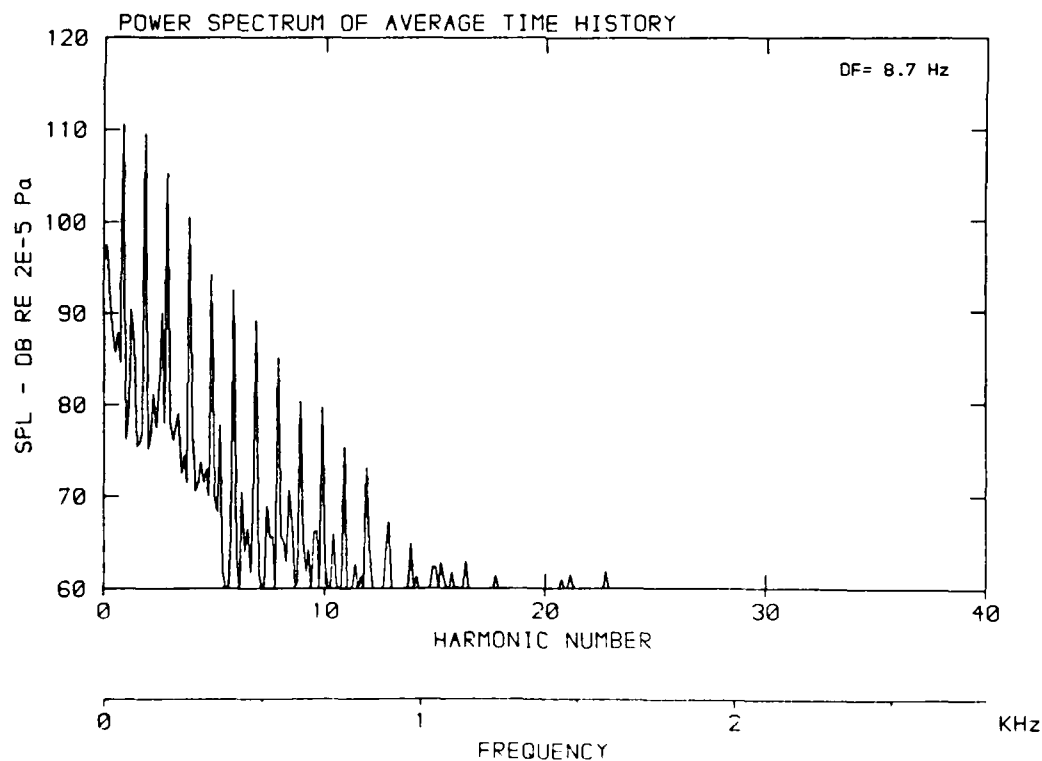
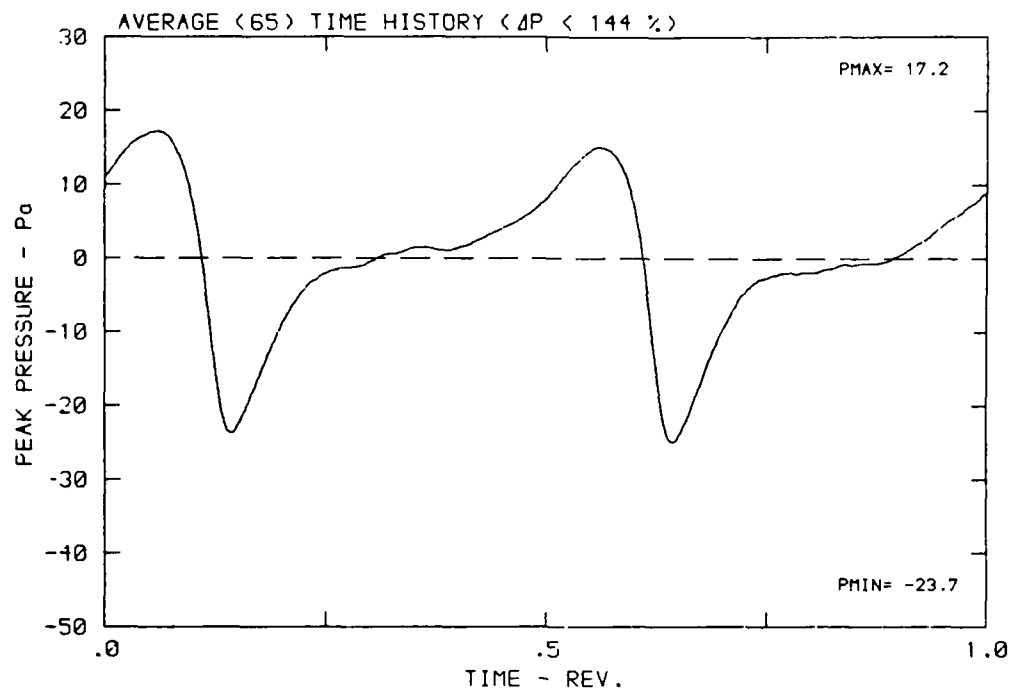
DATA POINT: LC-5 RUN: 137 MP: 8

p : 24.4° MH: .6750 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 287.0 K



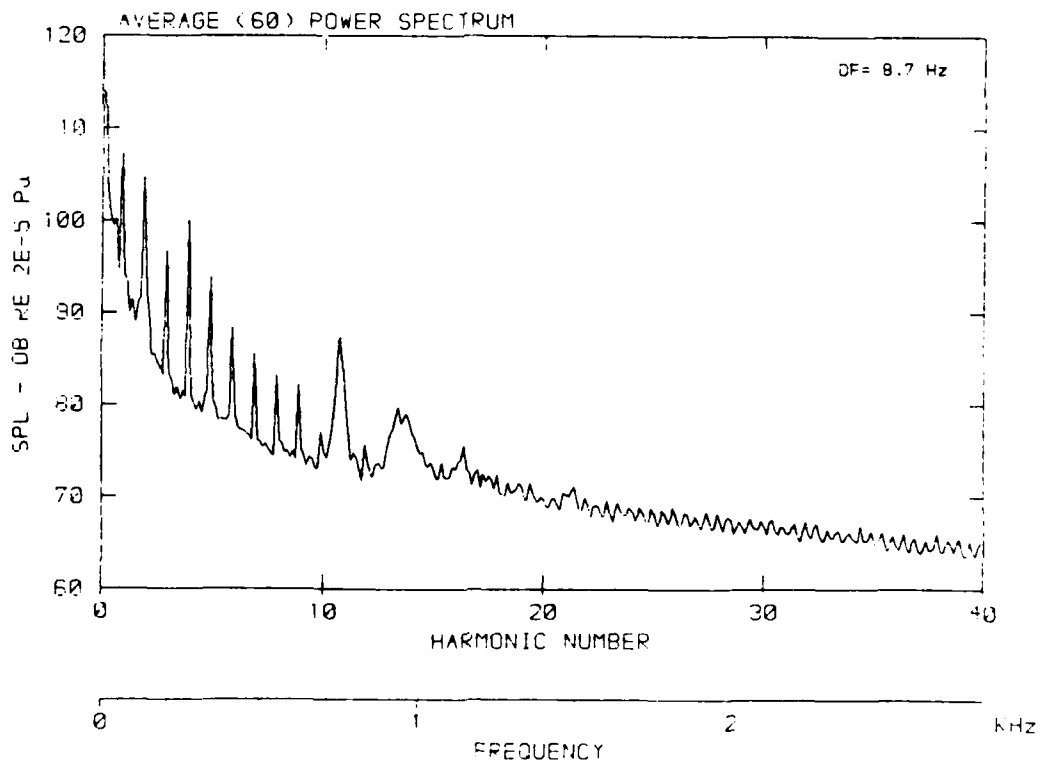
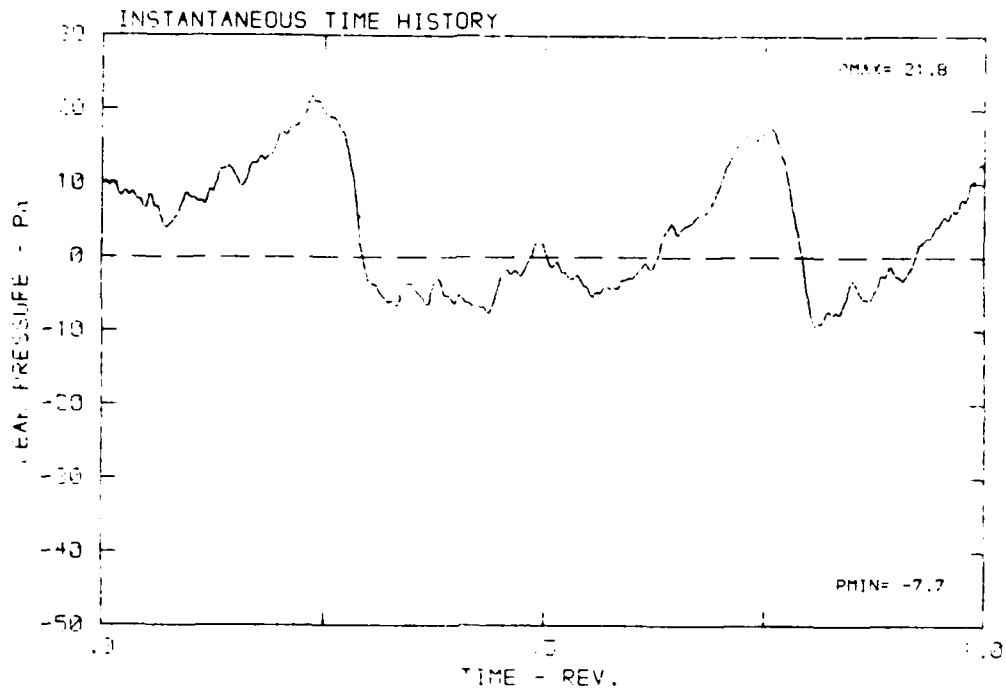
DATA POINT: LC-5 RUN: 137 MP: 8

β : 24.4° MH: .6750 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 287.0 K



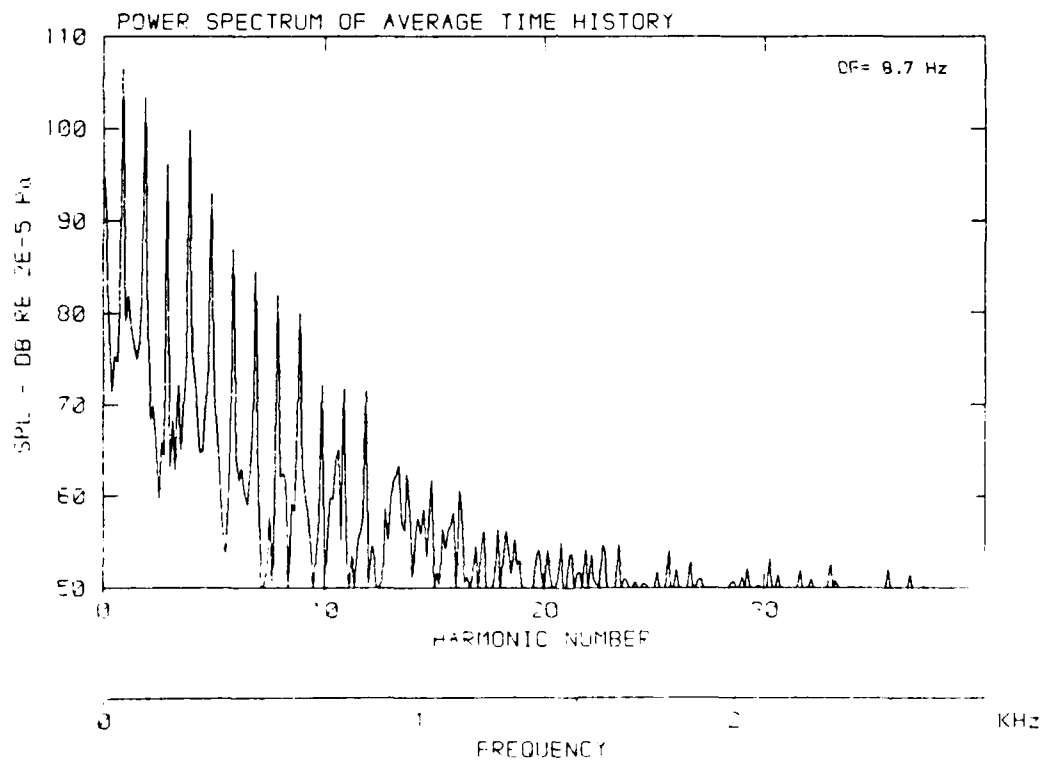
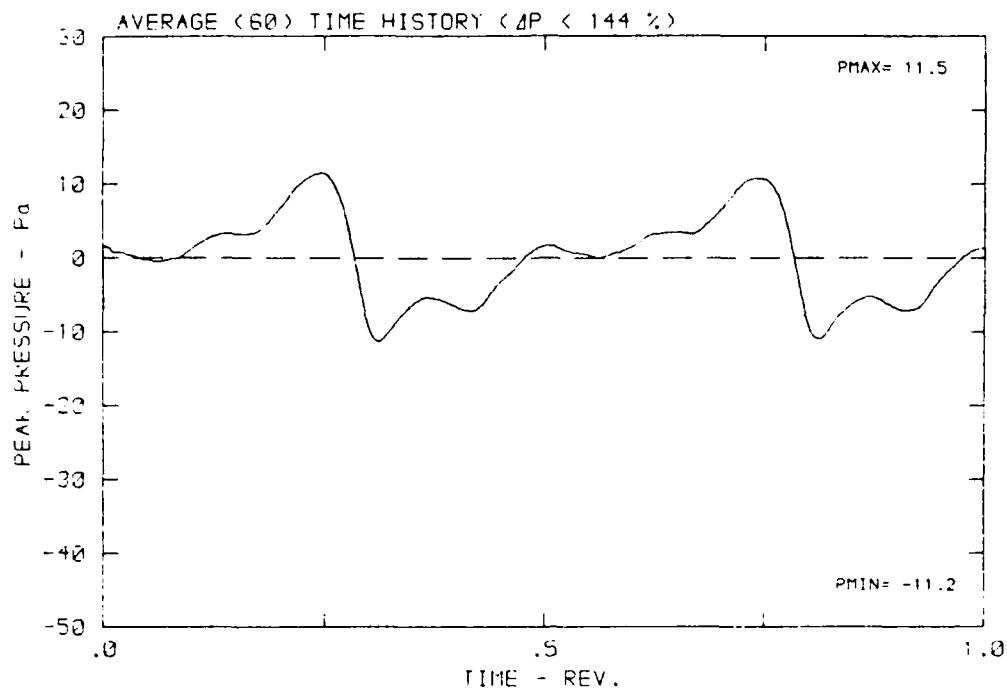
DATA POINT: LC-5 RUN: 137 MP: 9

β : 24.4° MH: .6750 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 237.0



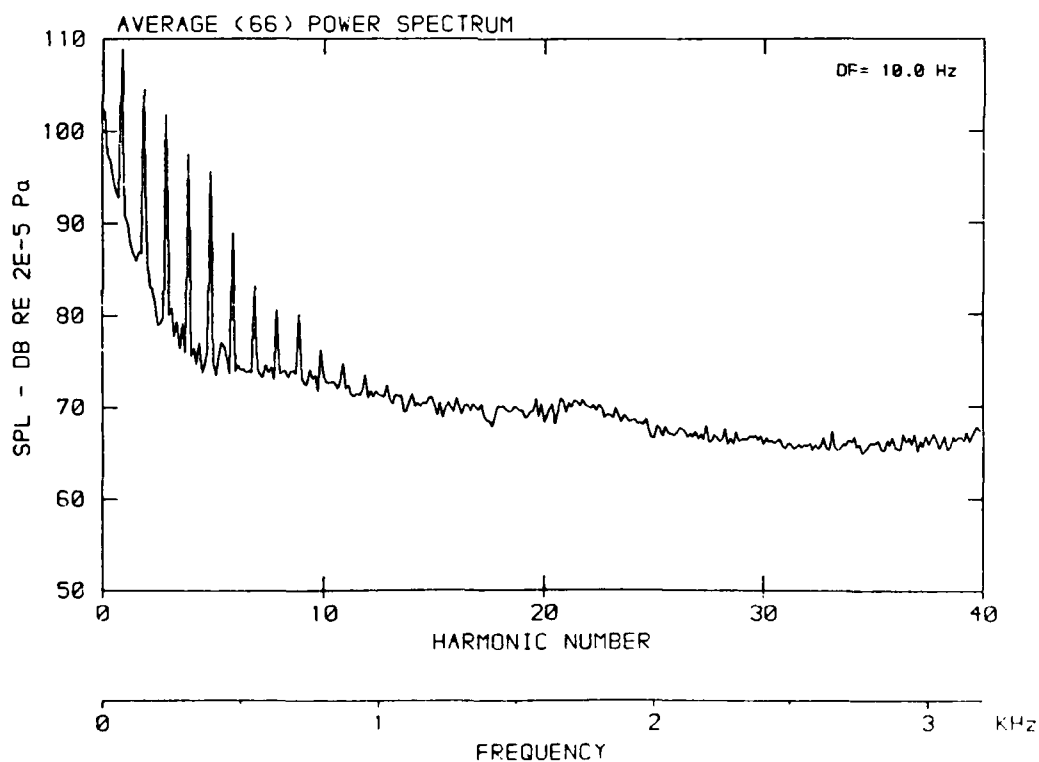
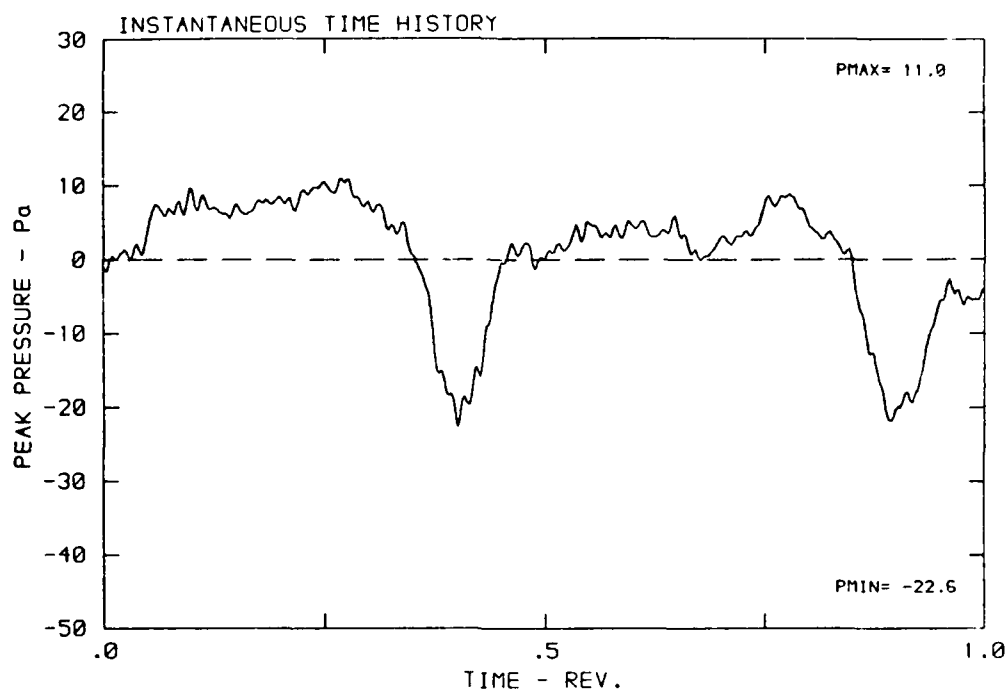
DATA POINT: LC-5 RUN: 137 MP: 9

β : 24.4° MH: .6750 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 287.0 K



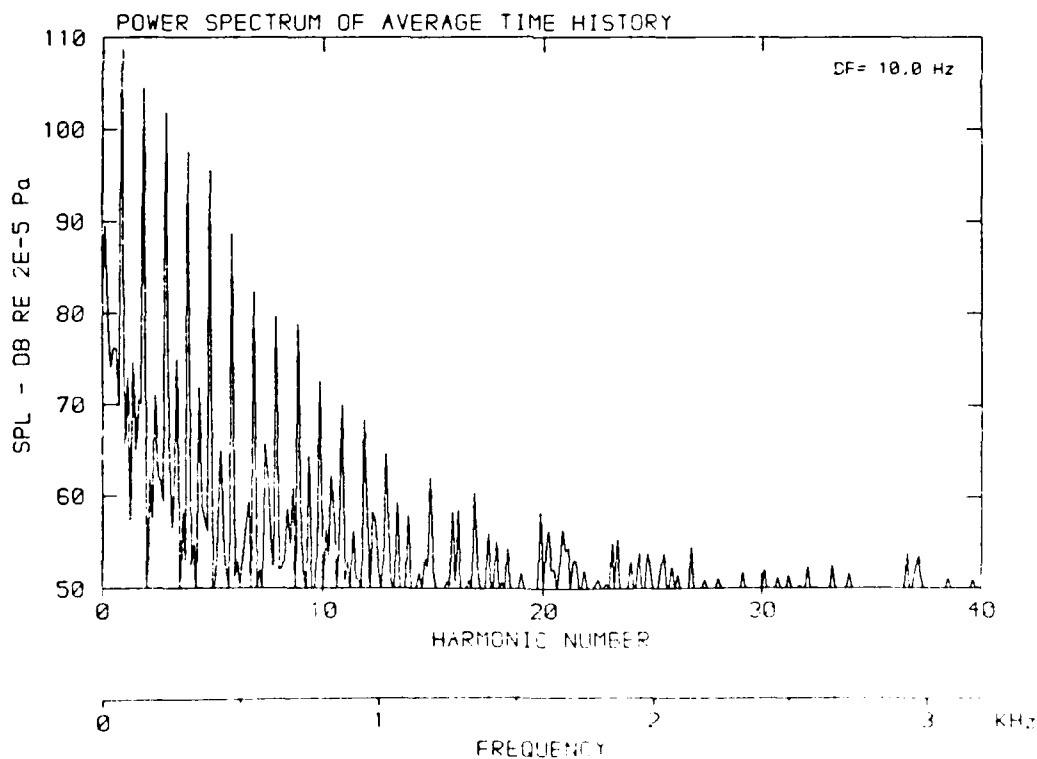
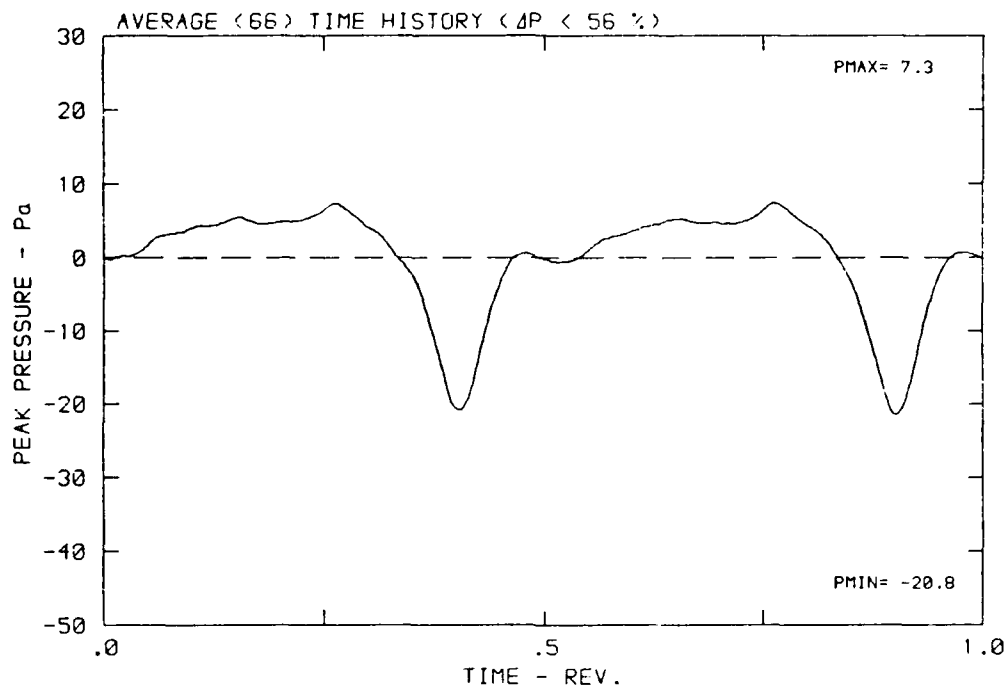
DATA POINT: LC-6 RUN: 138 MP: 1

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



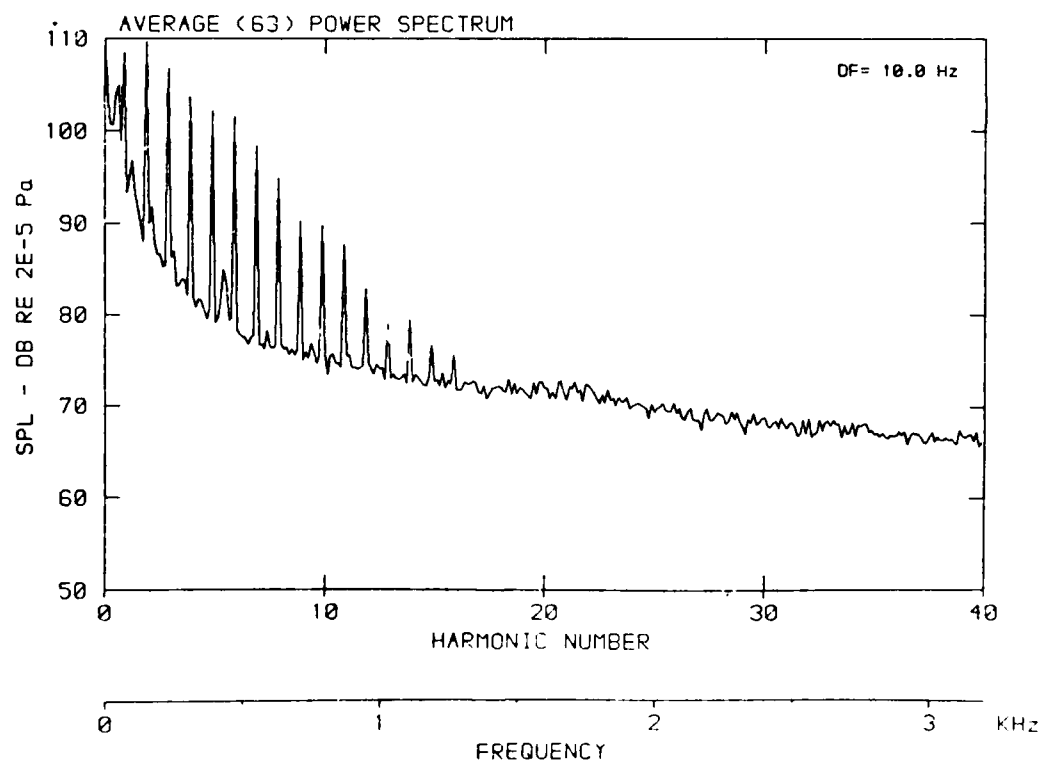
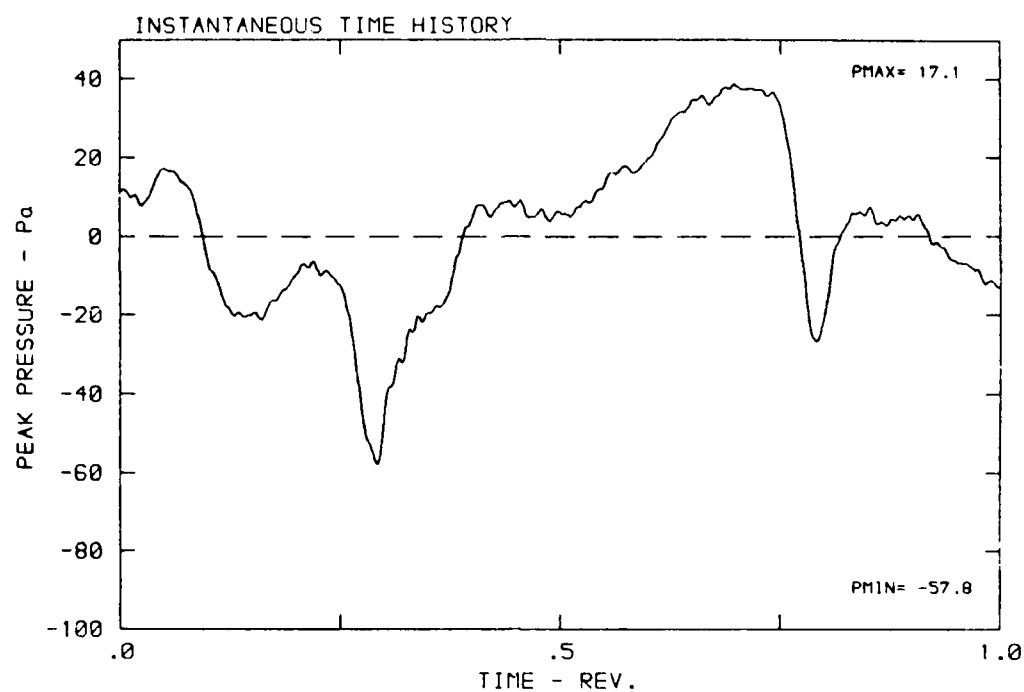
DATA POINT: LC-6 RUN: 138 MP: 1

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



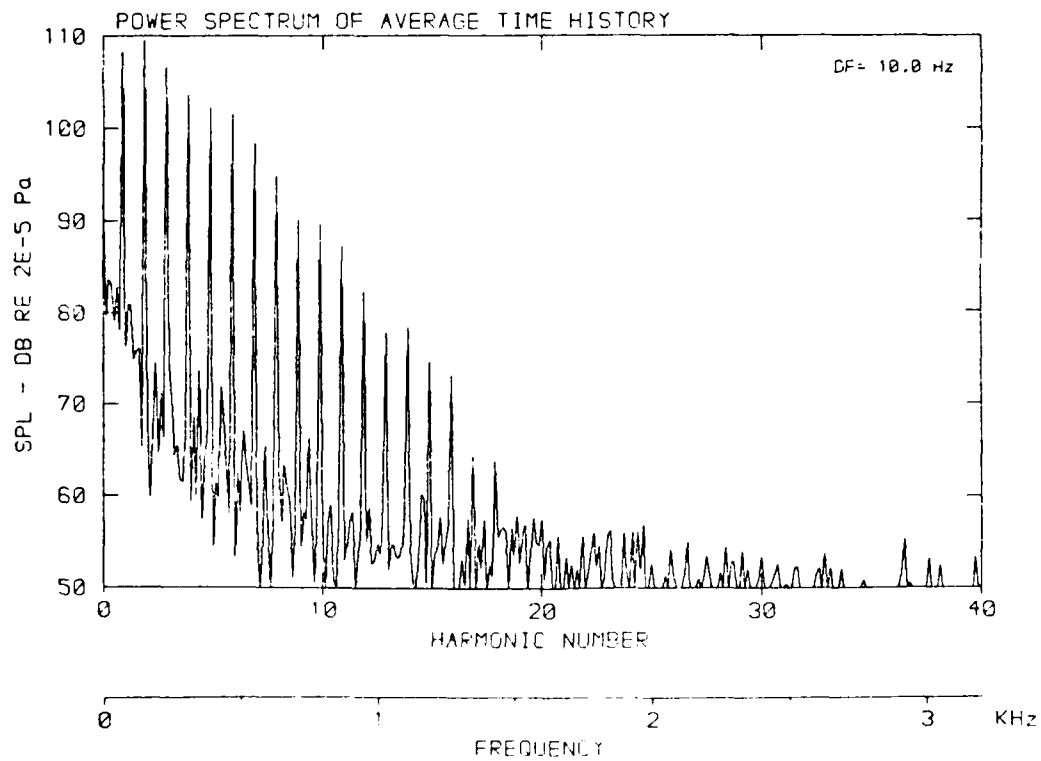
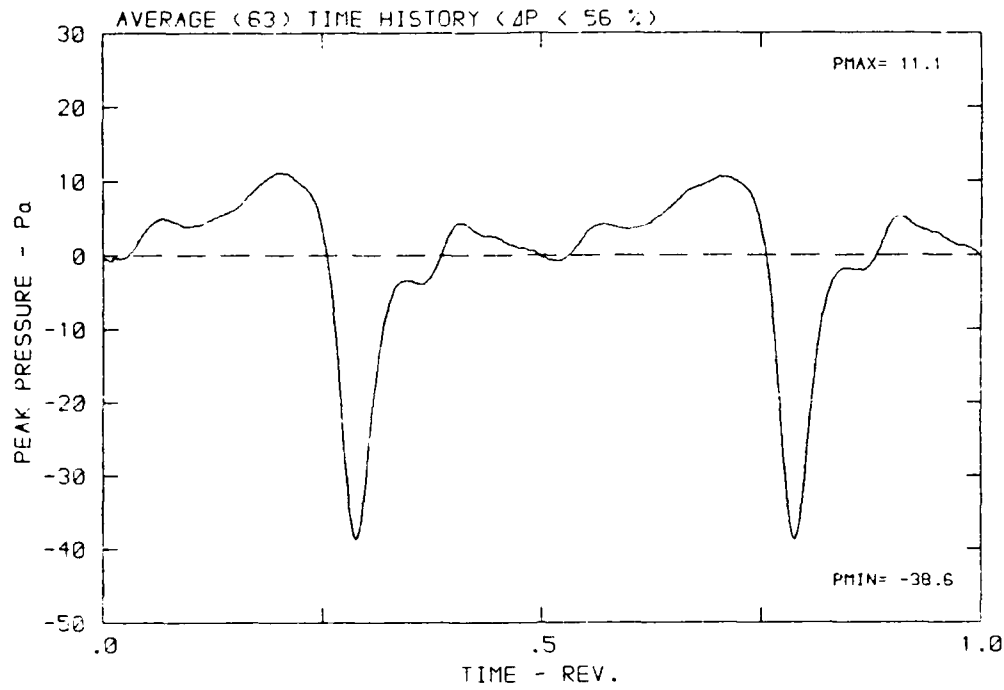
DATA POINT: LC-6 RUN: 138 MP: 2

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



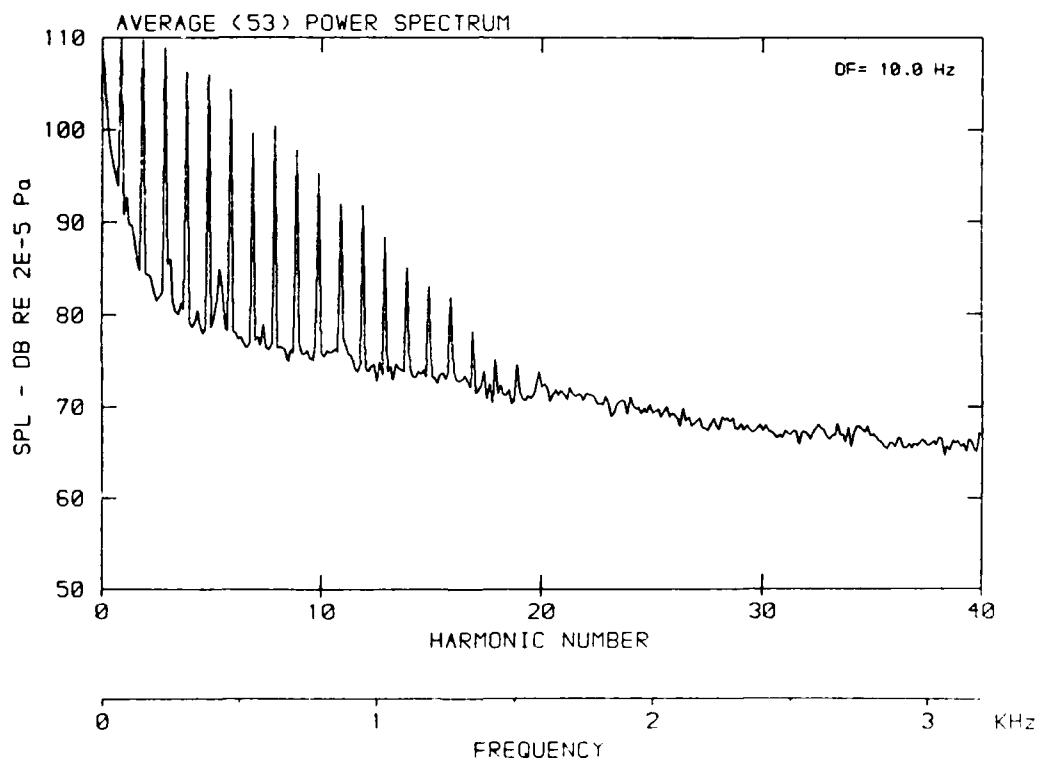
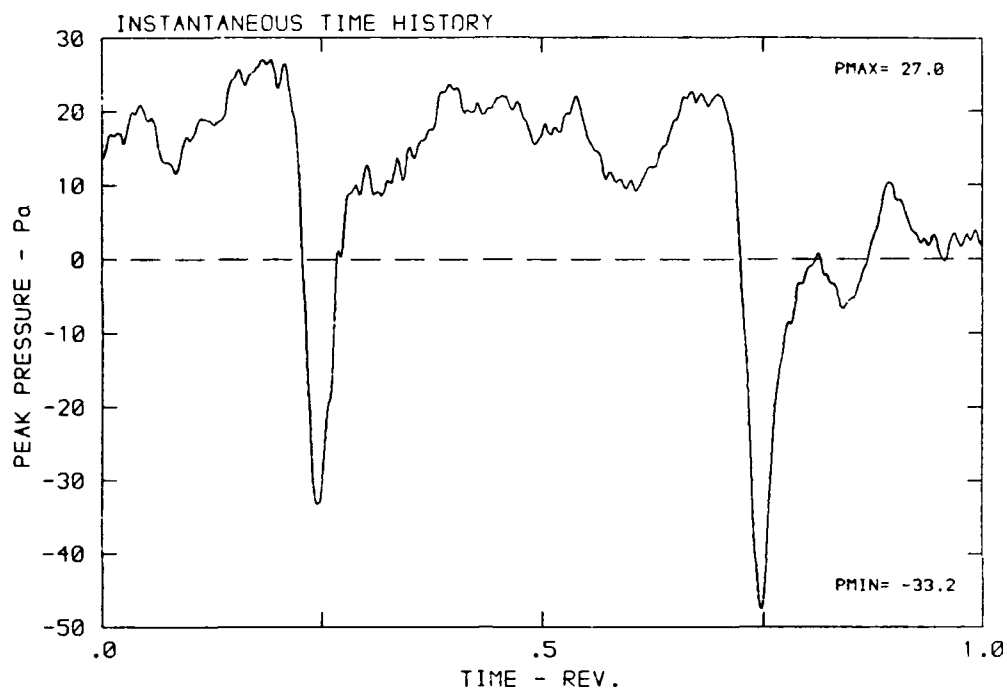
DATA POINT: LC-6 RUN: 138 MP: 2

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



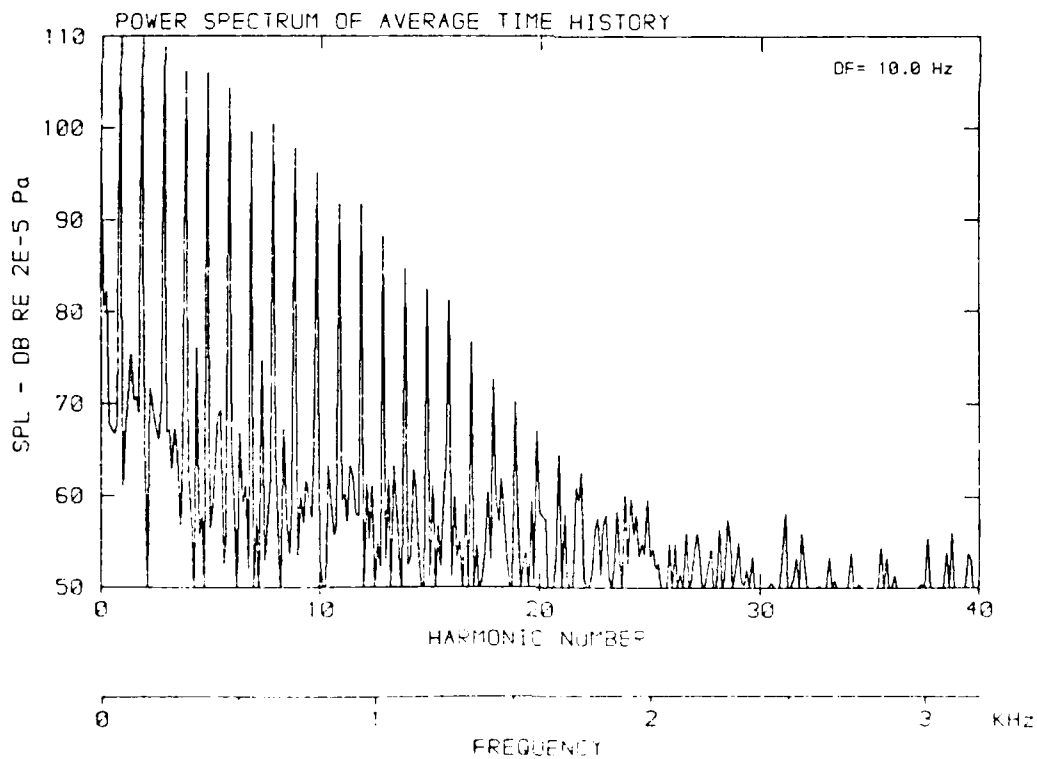
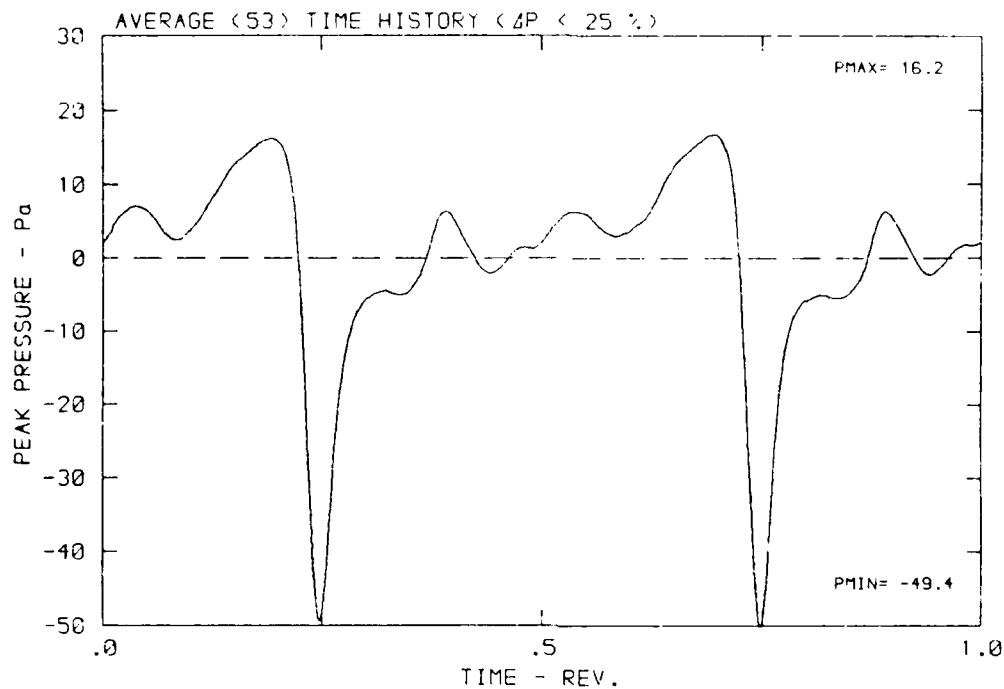
DATA POINT: LC-6 RUN: 138 MP: 3

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



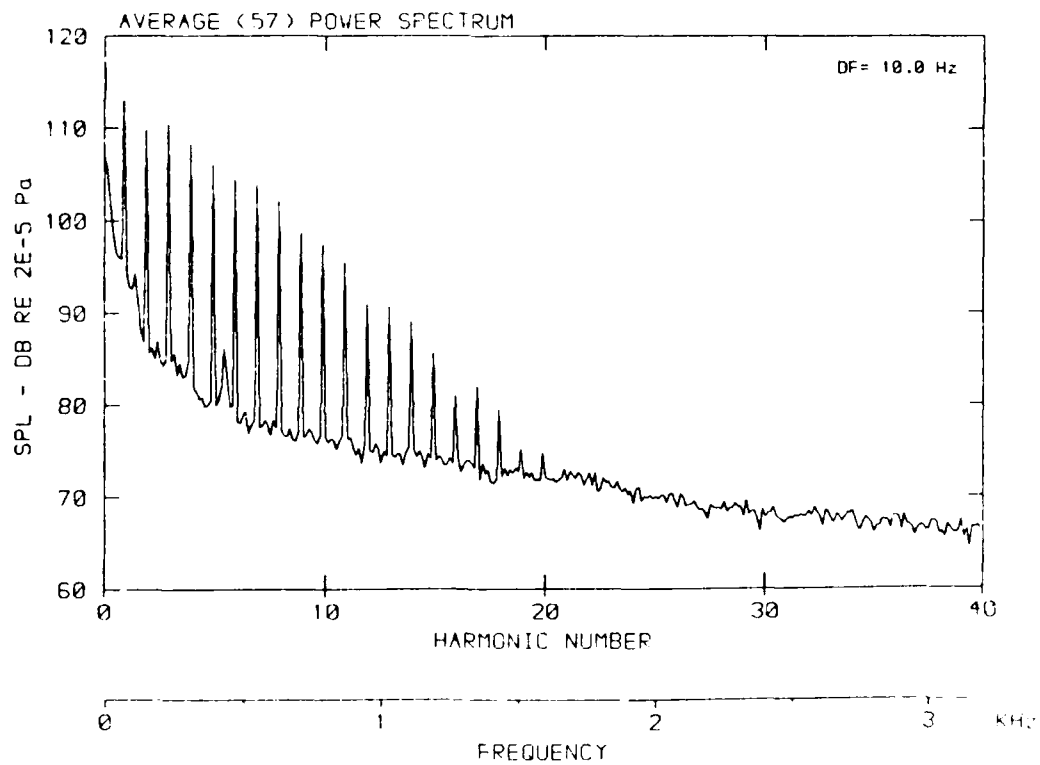
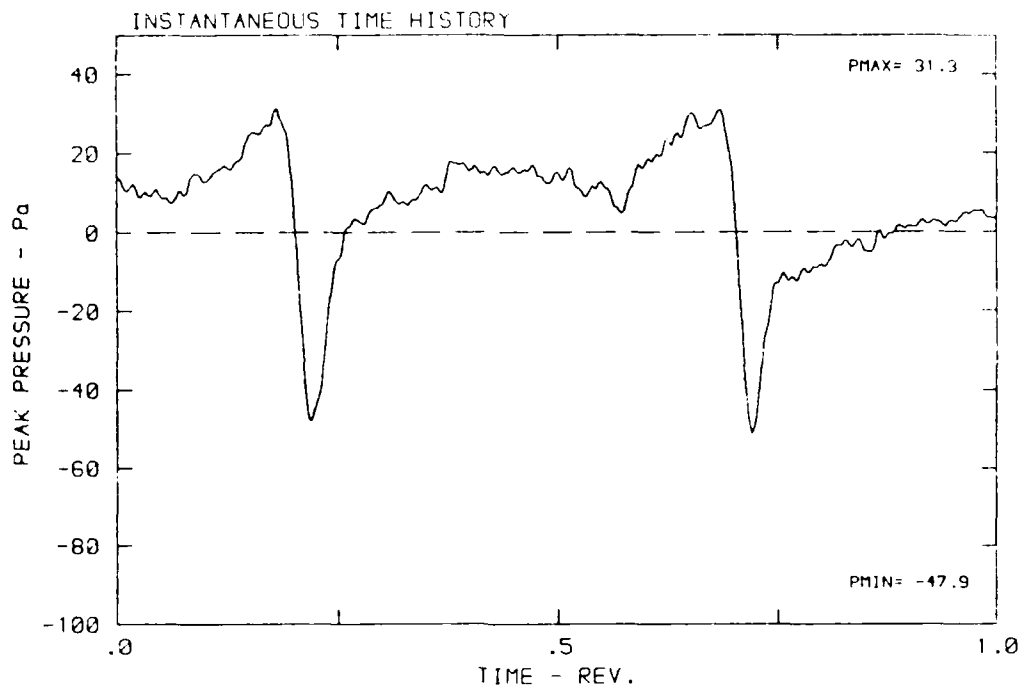
DATA POINT: LC-6 RUN: 138 MP: 3

β : 24.4° MH: .7768 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.4 K



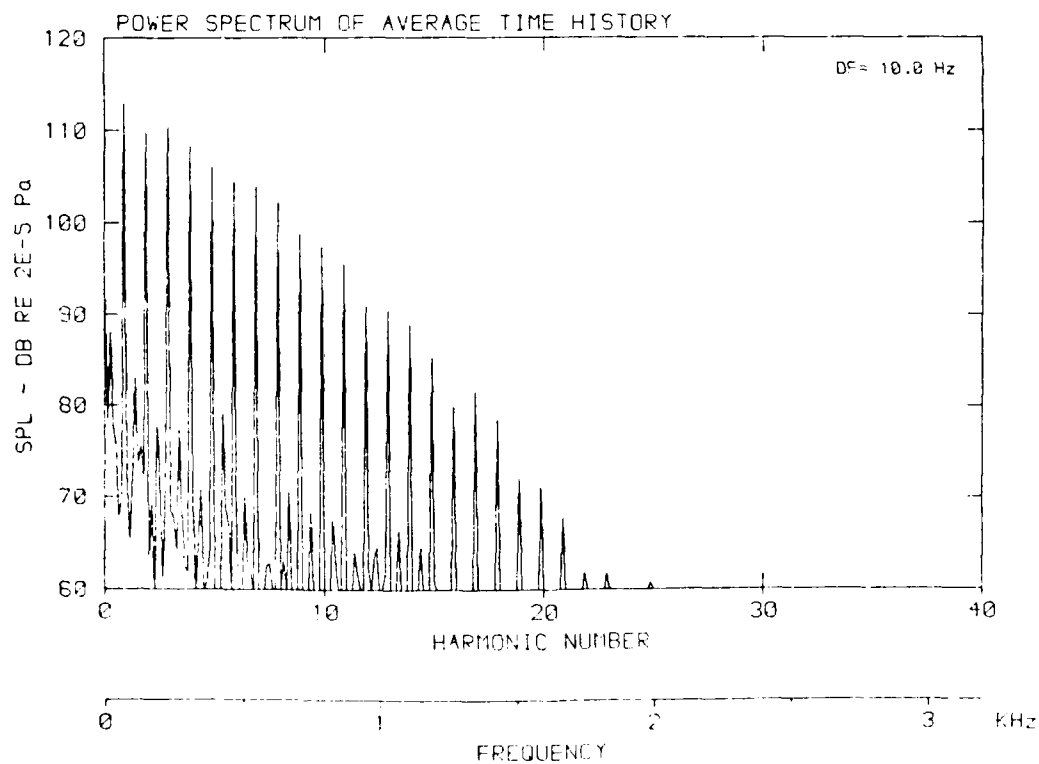
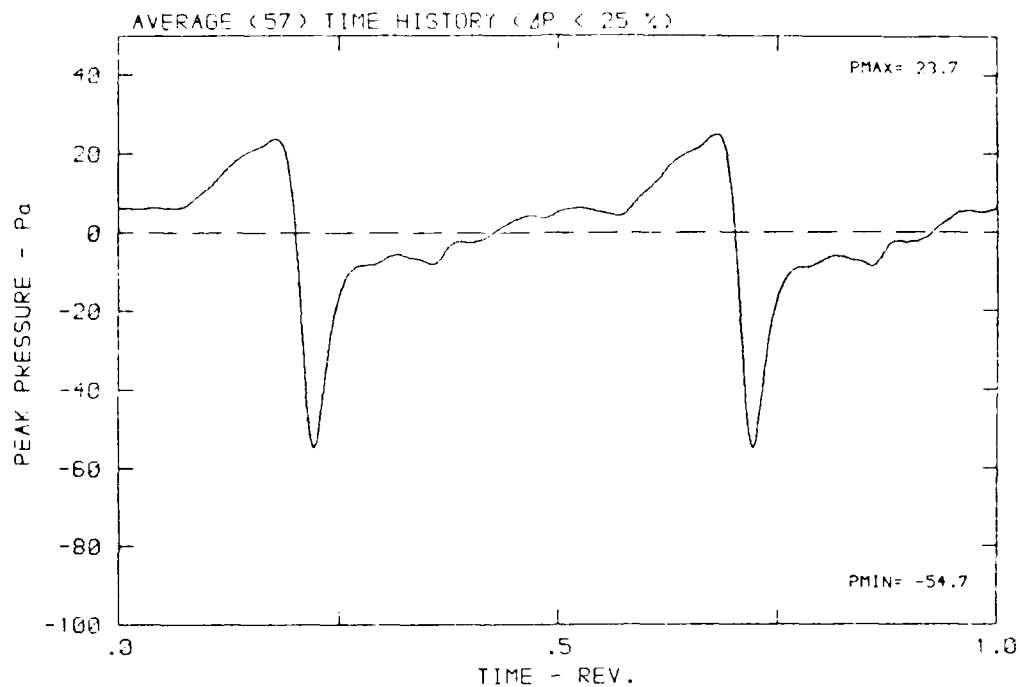
DATA POINT: LC-6 RUN: 138 MP: 4

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 281.4



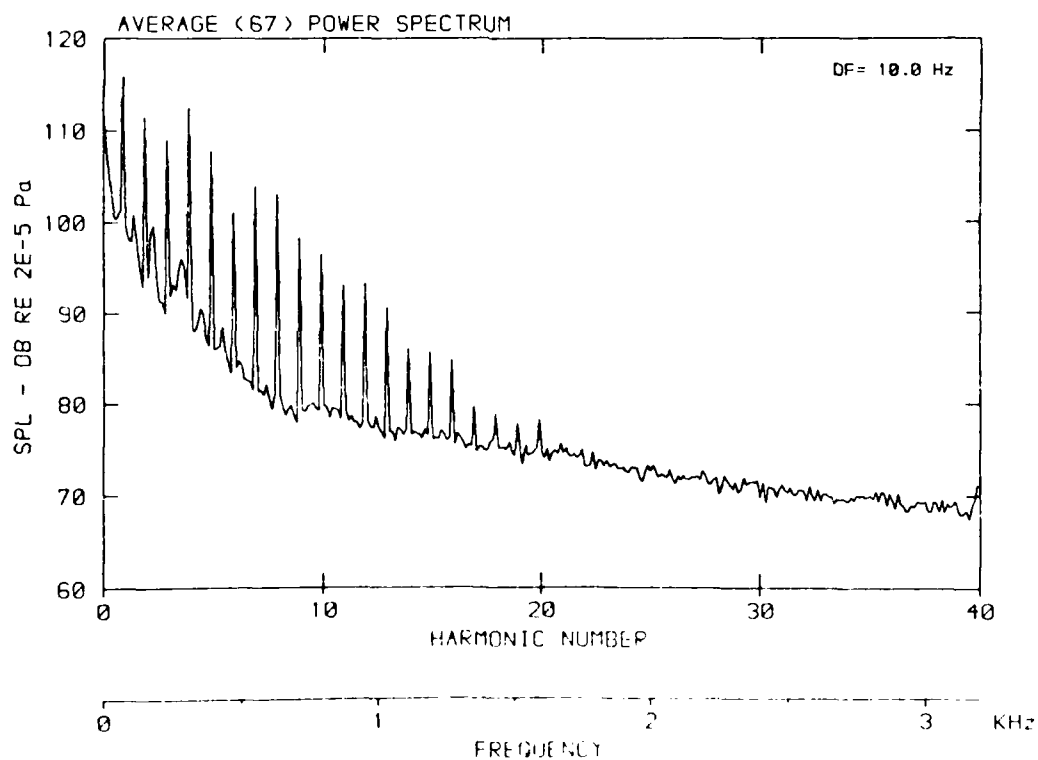
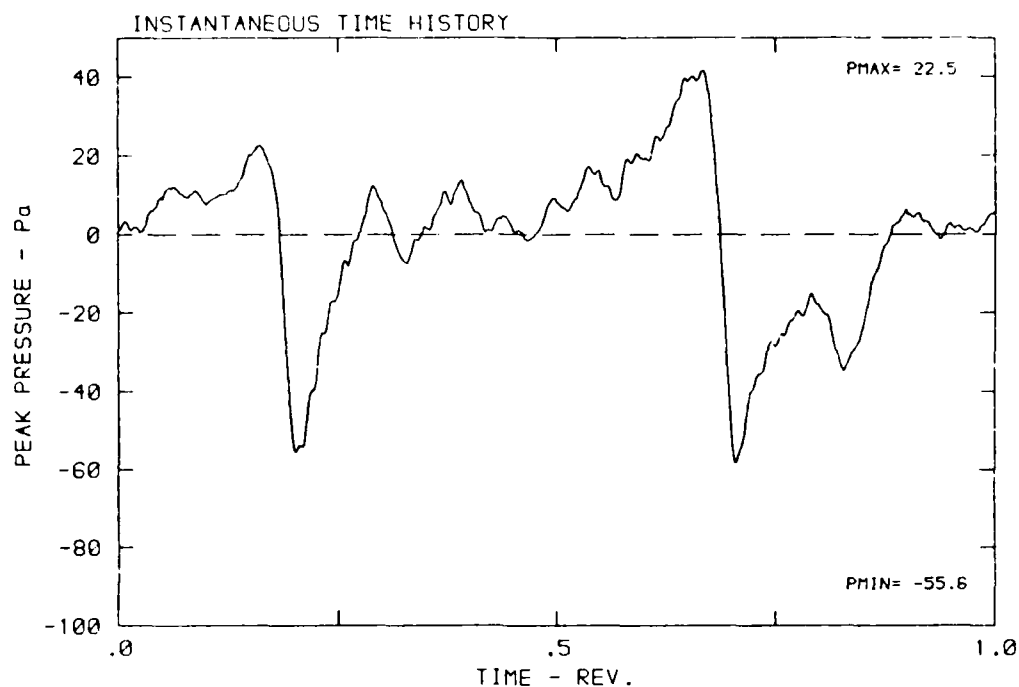
DATA POINT: LC-6 RUN: 138 MP: 4

β : 24.4° MH: .7768 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.4 K



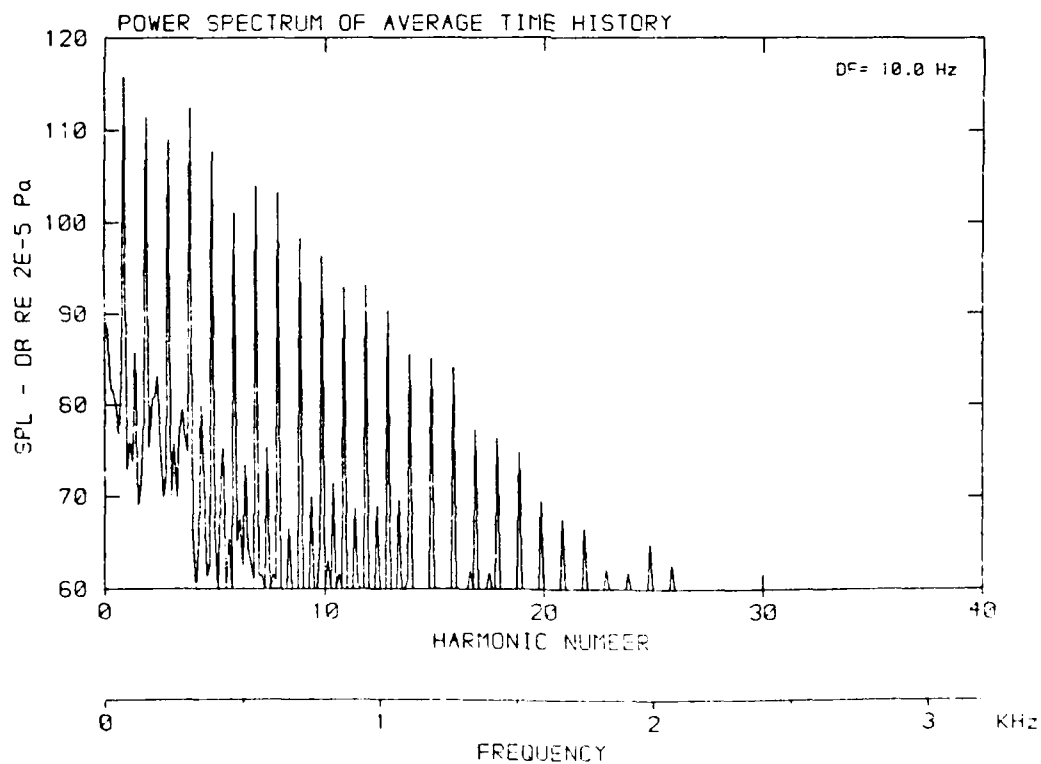
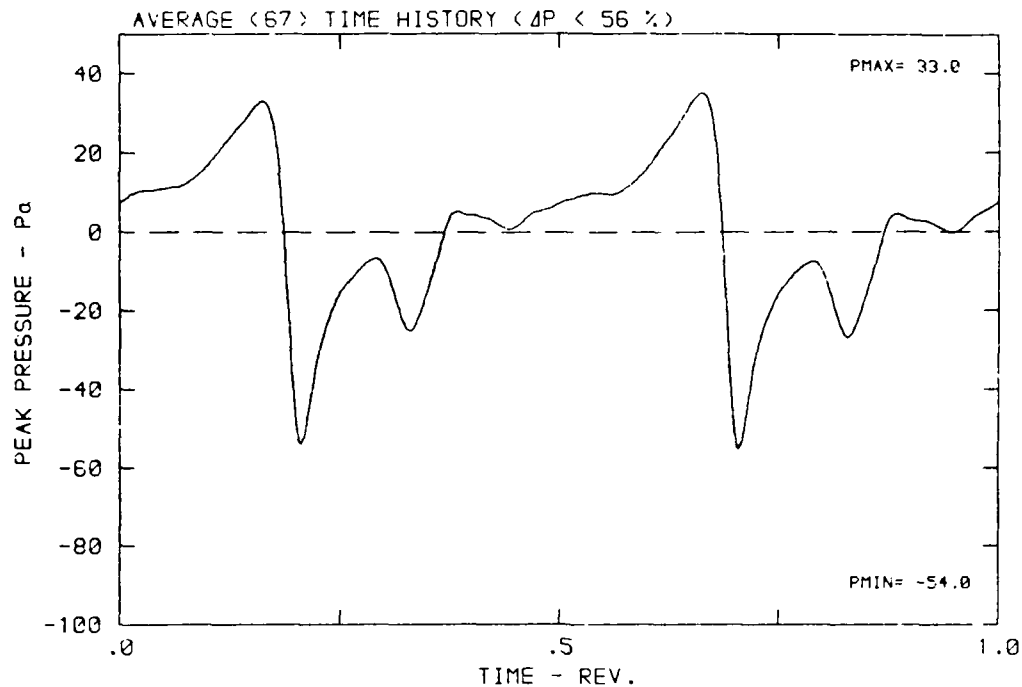
DATA POINT: LC-6 RUN: 138 MP: 5

β : 24.4° MH: .7768 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.4 K



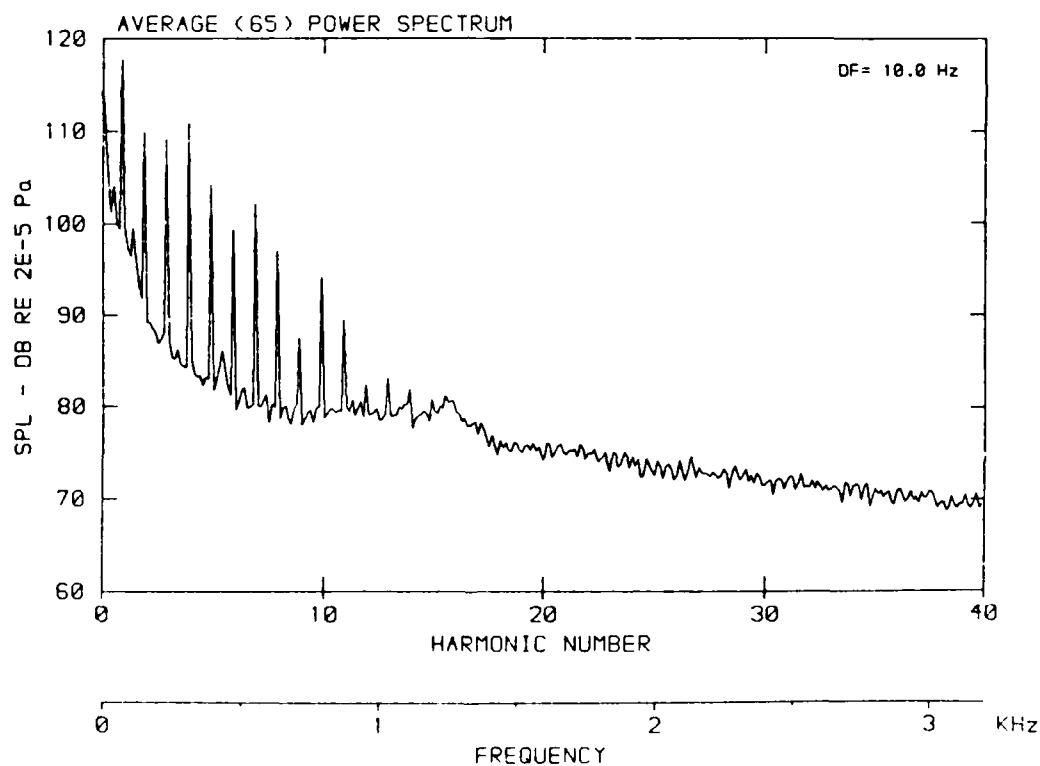
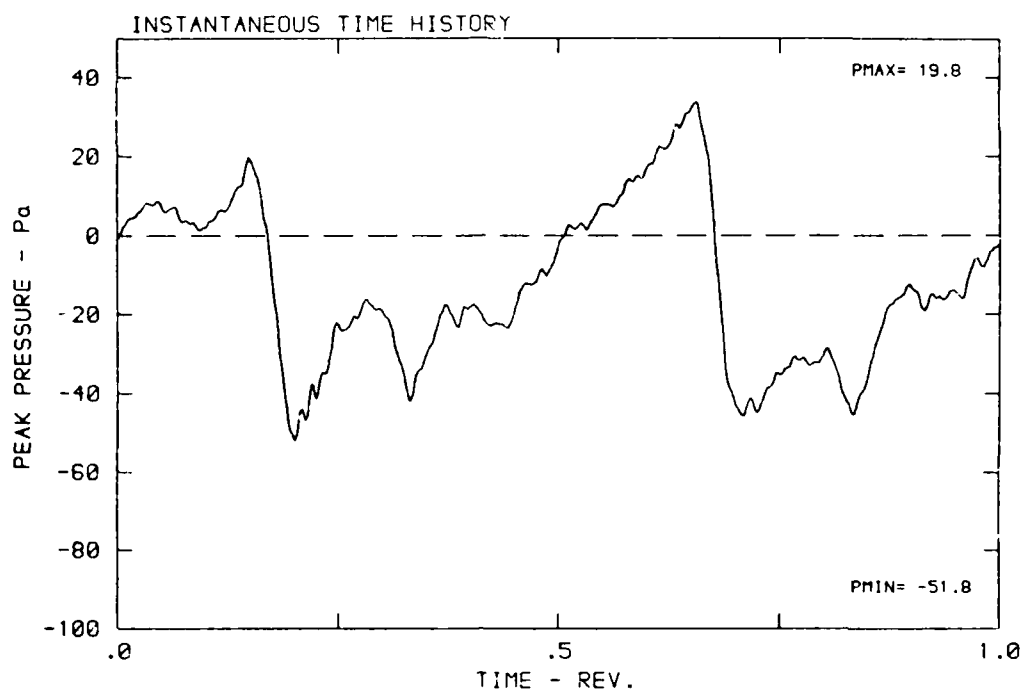
DATA POINT: LC-6 RUN: 138 MP: 5

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



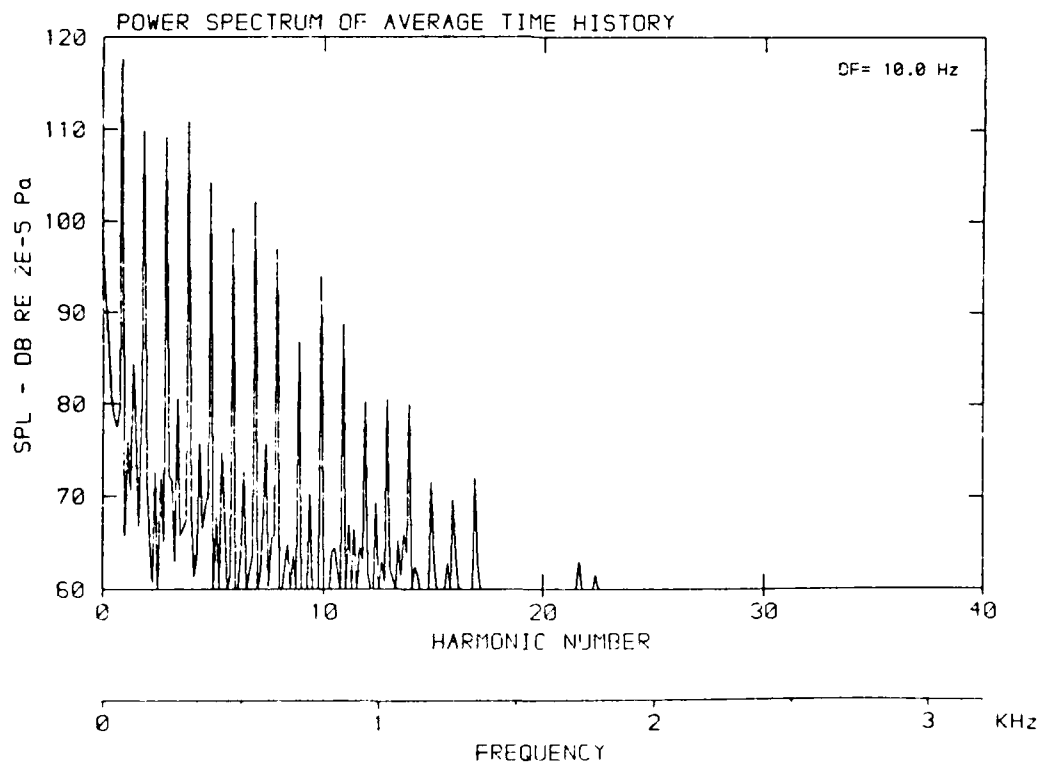
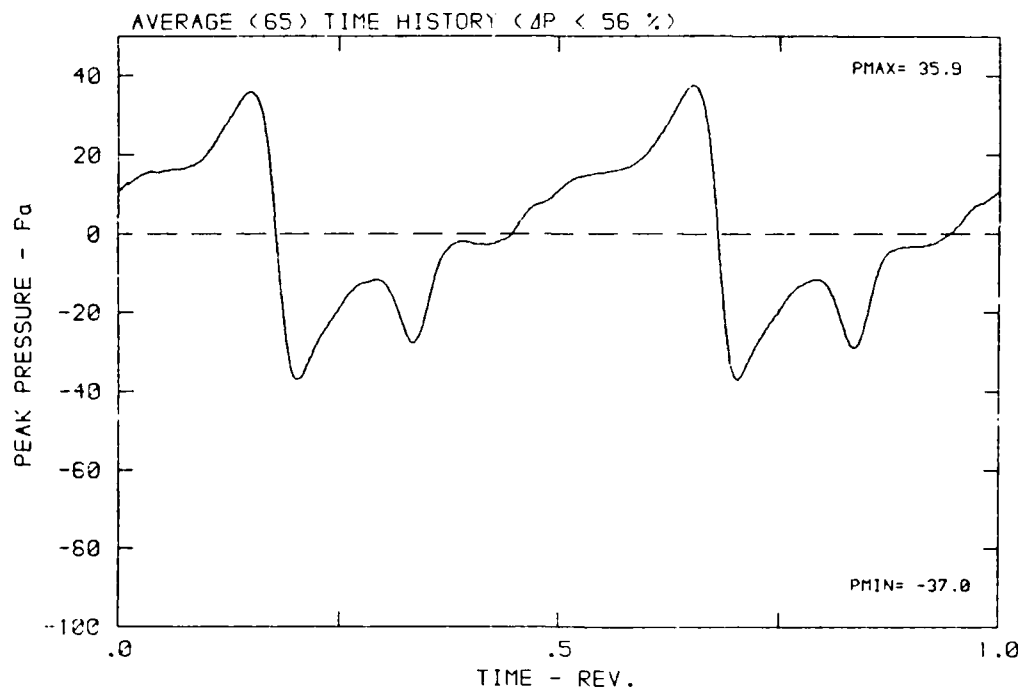
DATA POINT: LC-6 RUN: 138 MP: 6

β : 24.4° MH: .7768 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.4 K



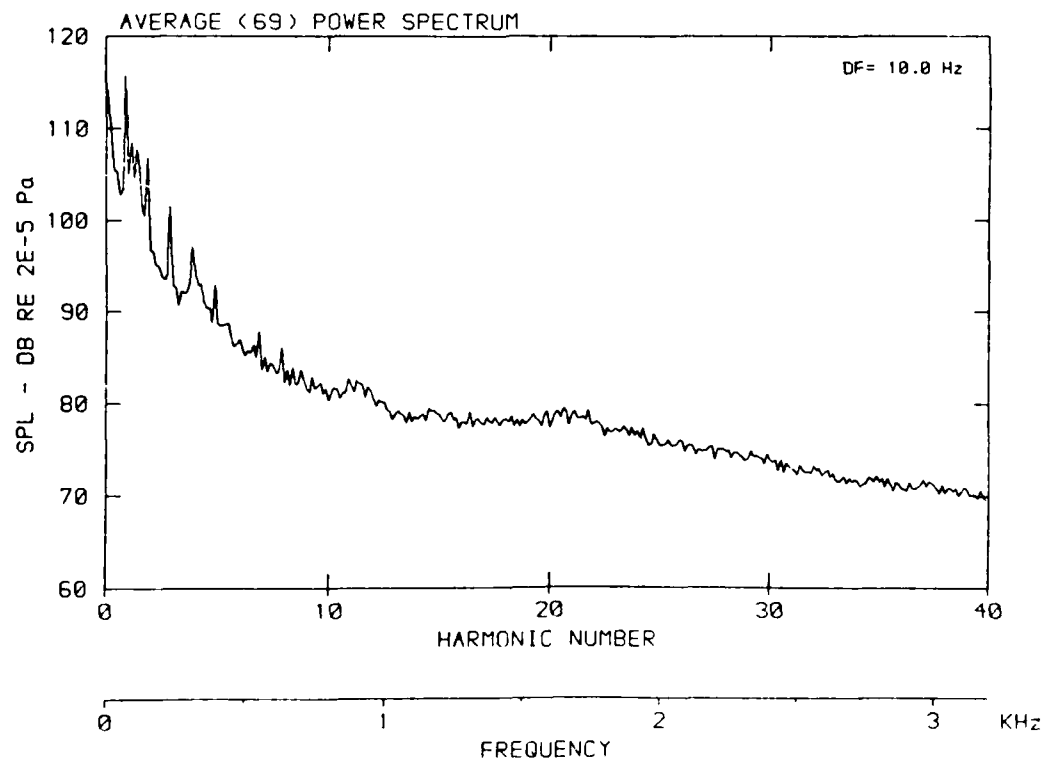
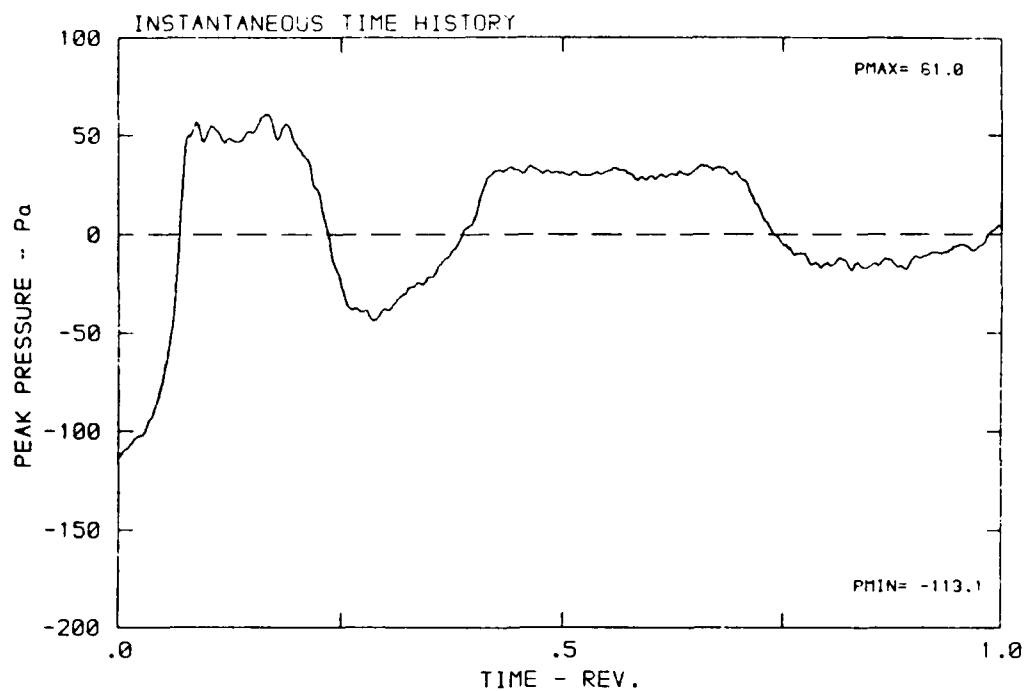
DATA POINT: LC-6 RUN: 138 MP: 6

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



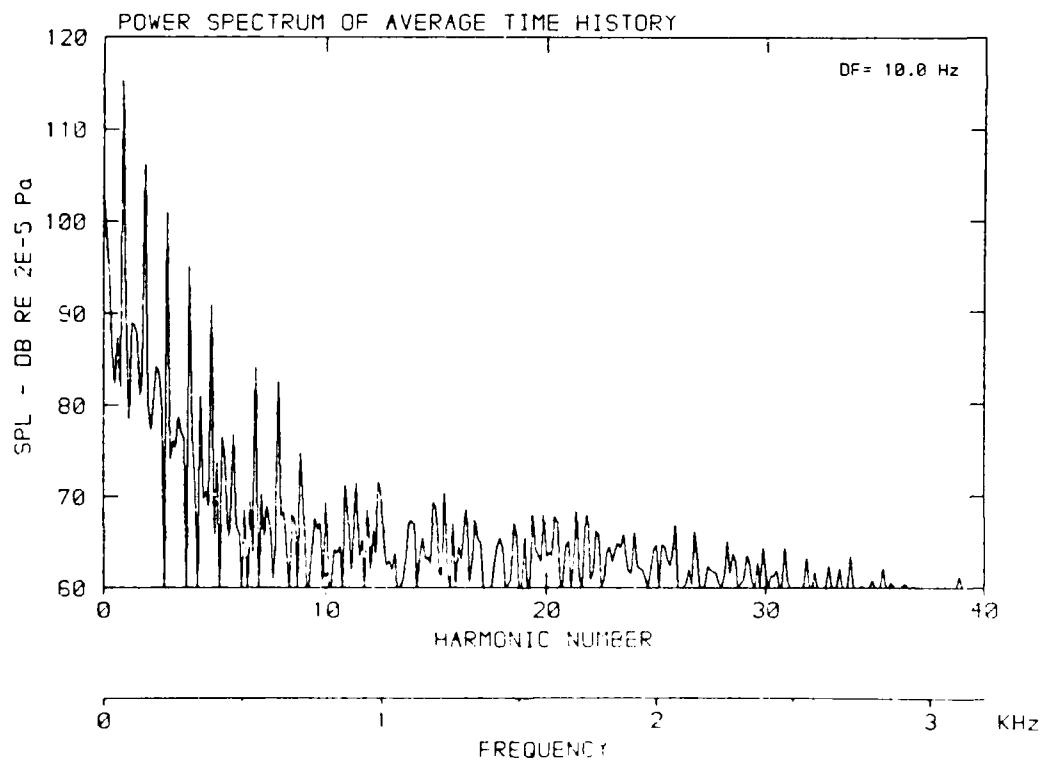
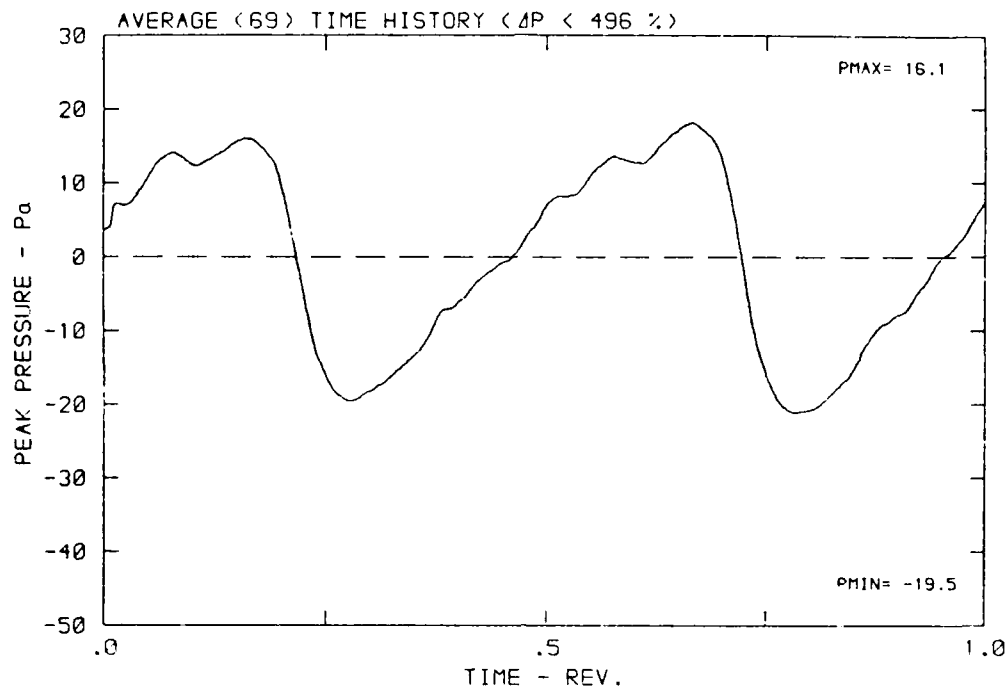
DATA POINT: LC-6 RUN: 138 MP: 7

β : 24.4° MH: .7758 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 F



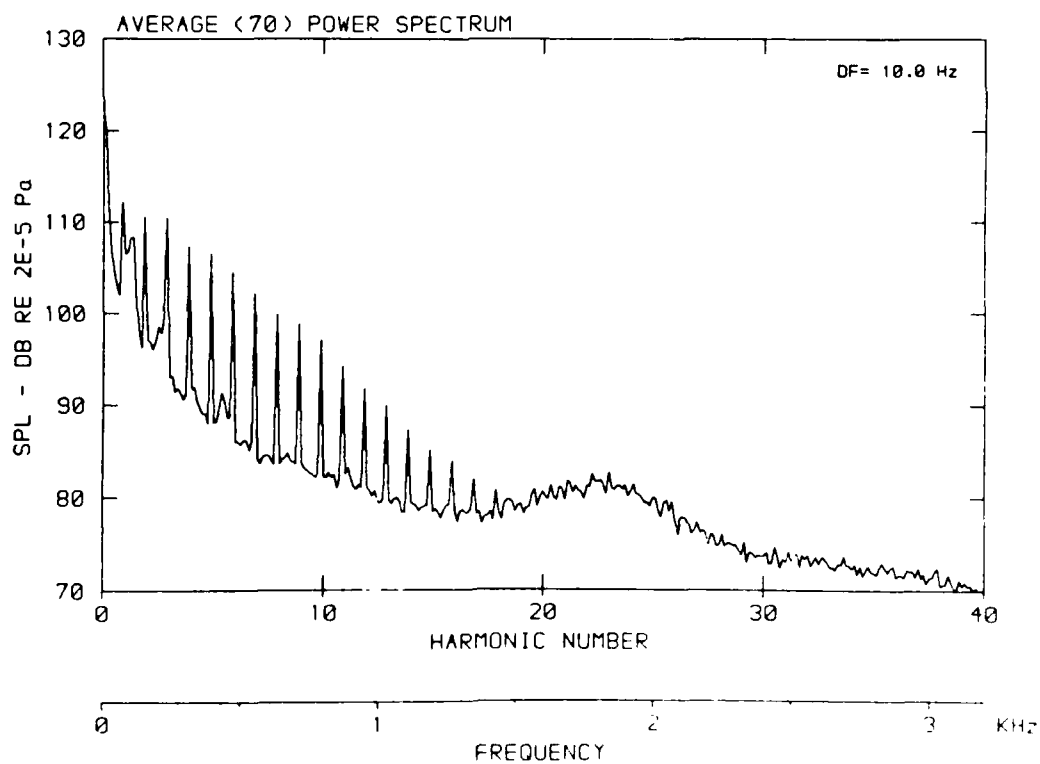
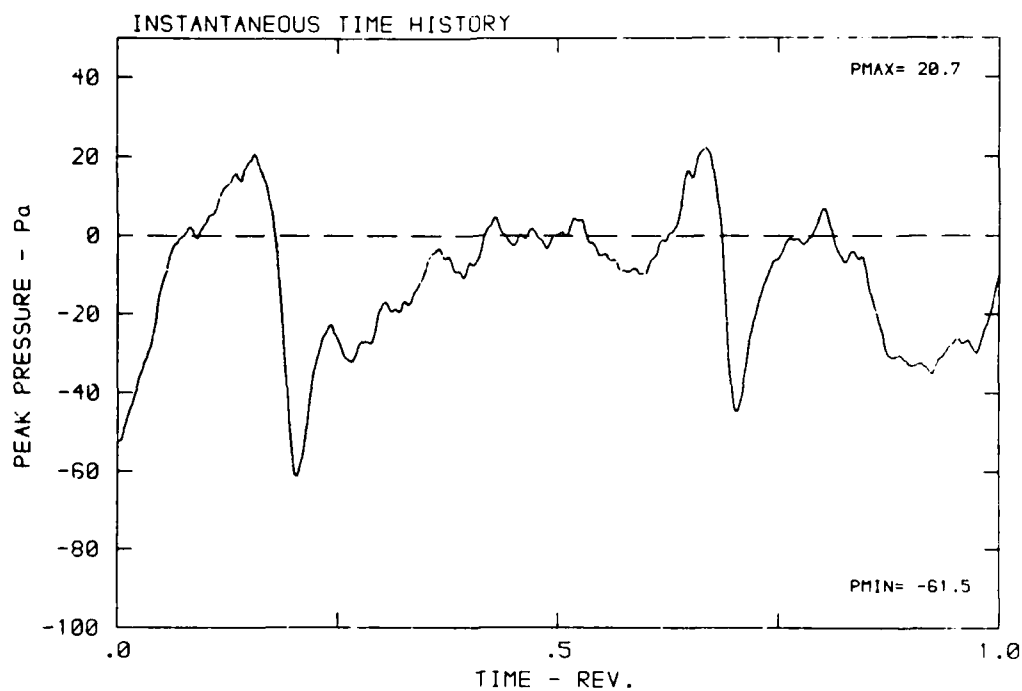
DATA POINT : LC-6 RUN : 138 MP : 7

β : 24.4° MH : .7768 n : 2400 rpm v/u : .263 ϕ : -3.8° T : 287.4 K



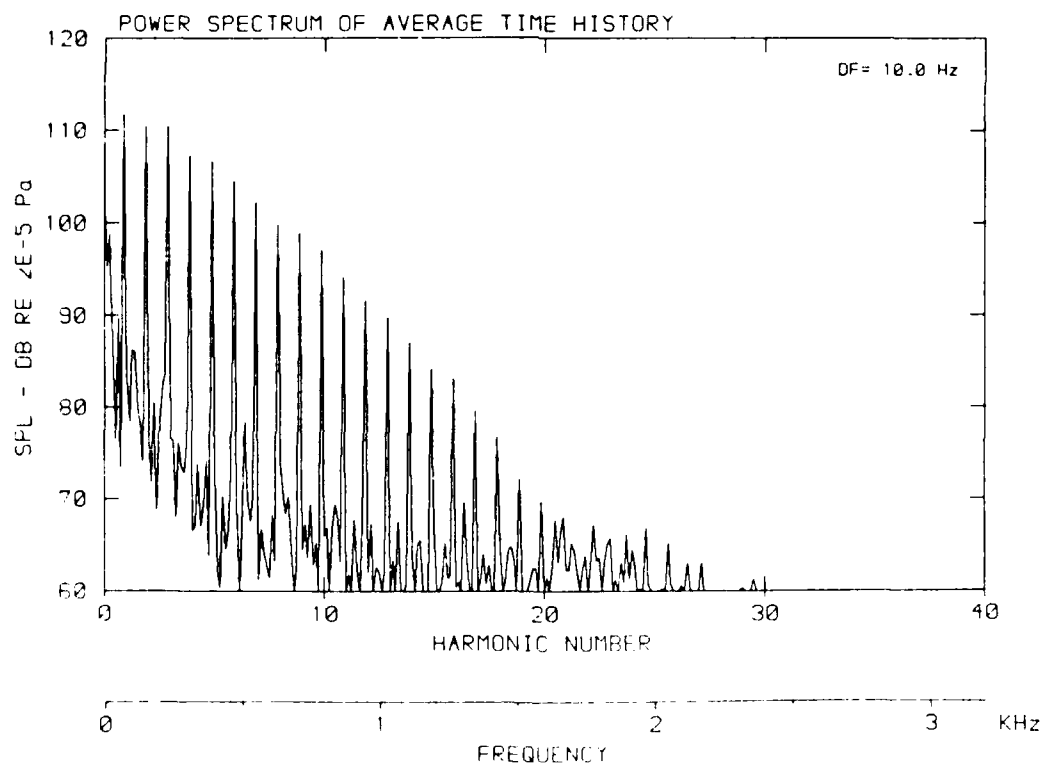
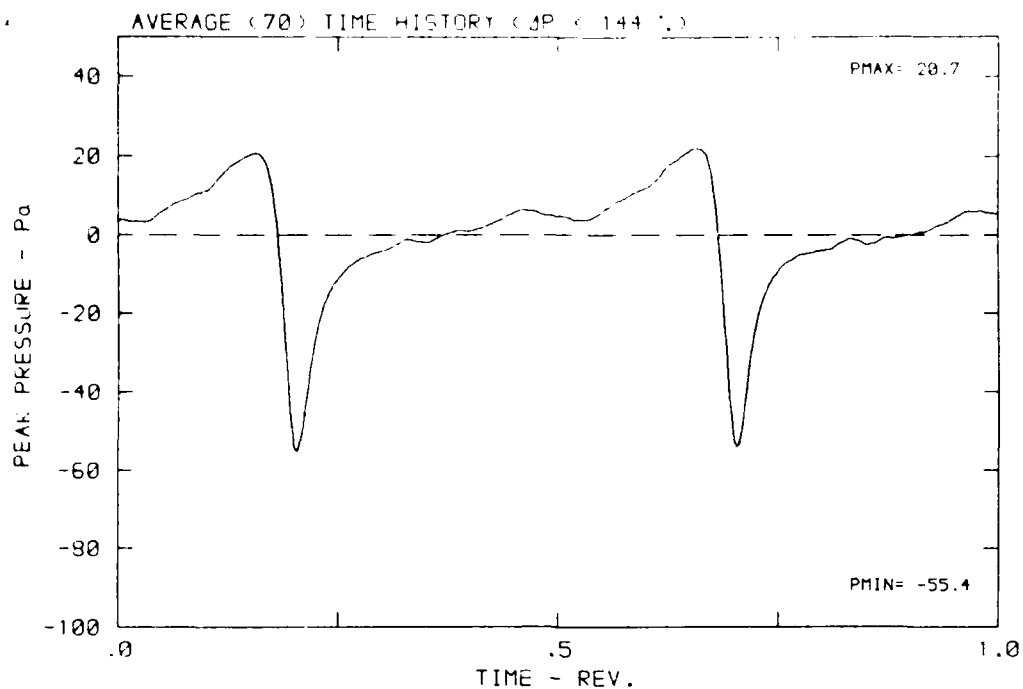
DATA POINT: LC-6 RUN: 138 MP: 8

β : 24.4° MH: .7768 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.4 K



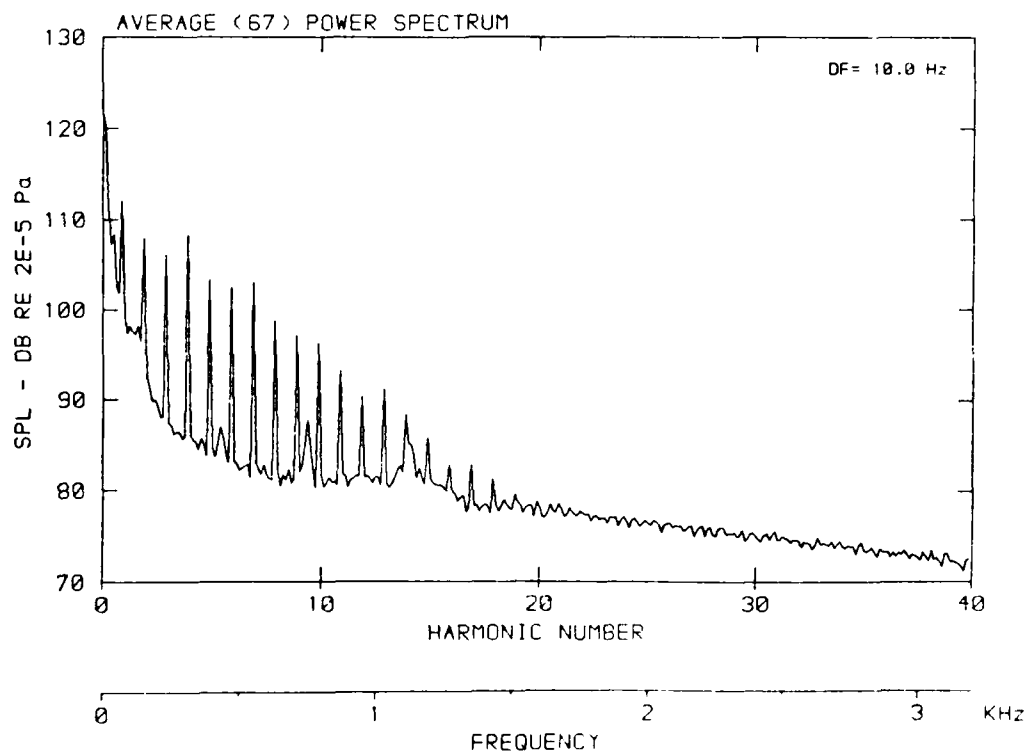
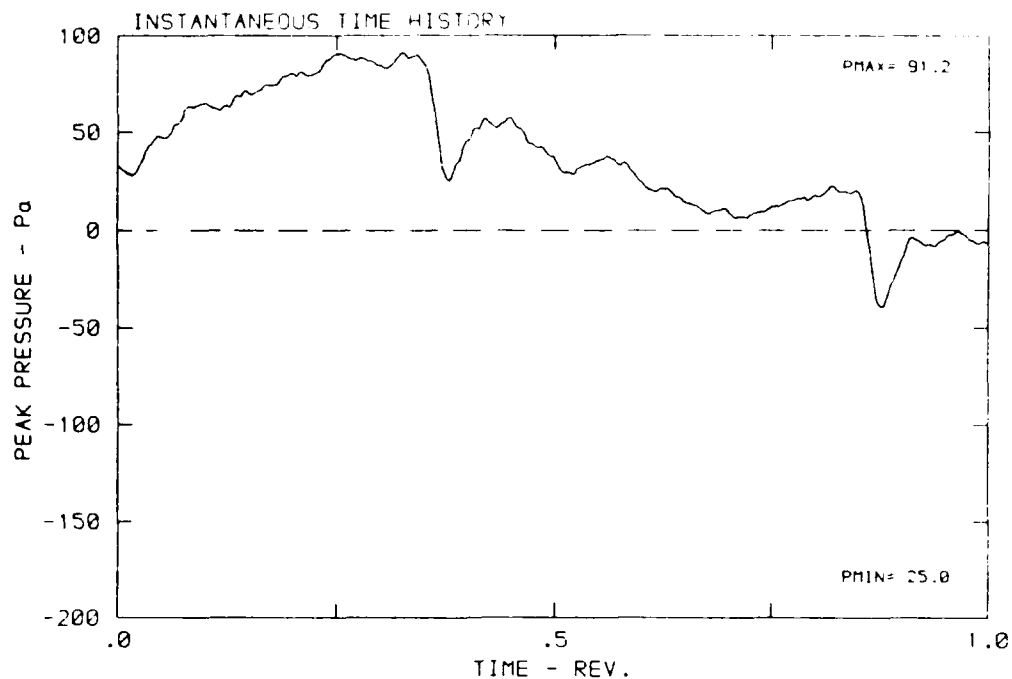
DATA POINT: LC-6 RUN: 138 MP: 8

β : 2.0 MH: .7768 n: 2400 rpm v_{zu} : .263 ϕ : -3.8° T: 287.4 K



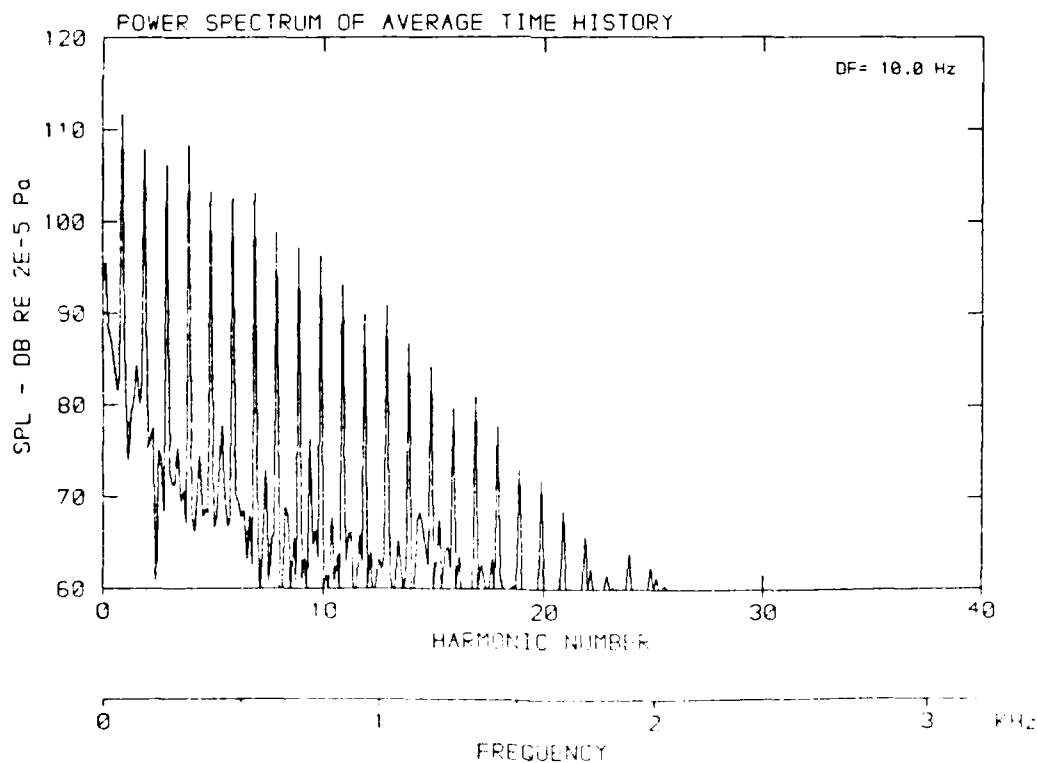
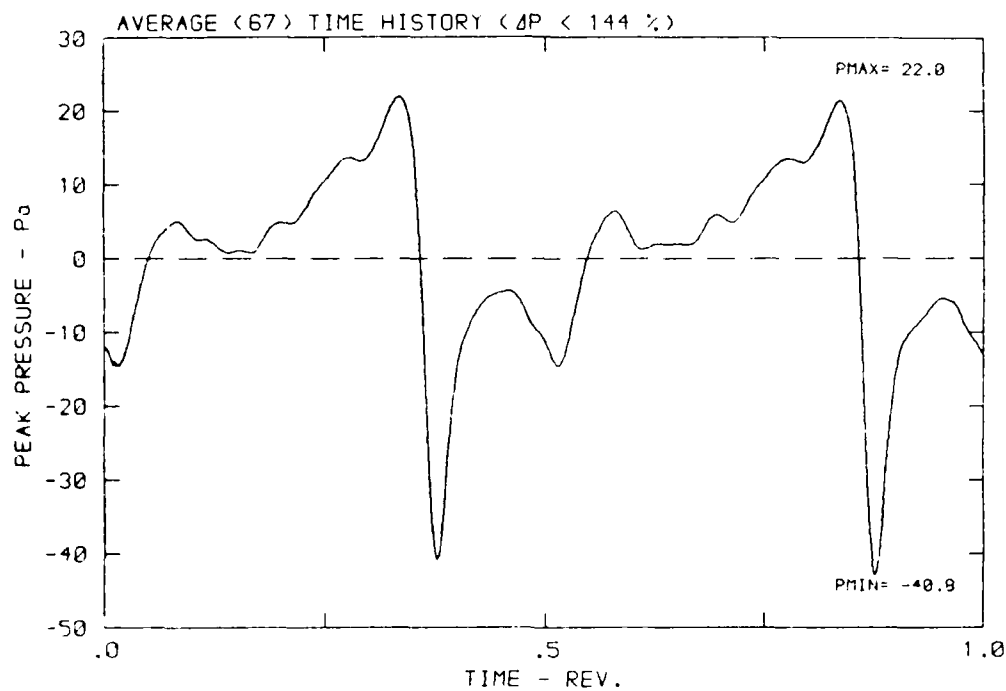
DATA POINT: LC-6 RUN: 138 MP: 9

β : 24.4° MH: .7768 n: 2400 rpm v/u : .263 ϕ : -3.8° T : 287.4



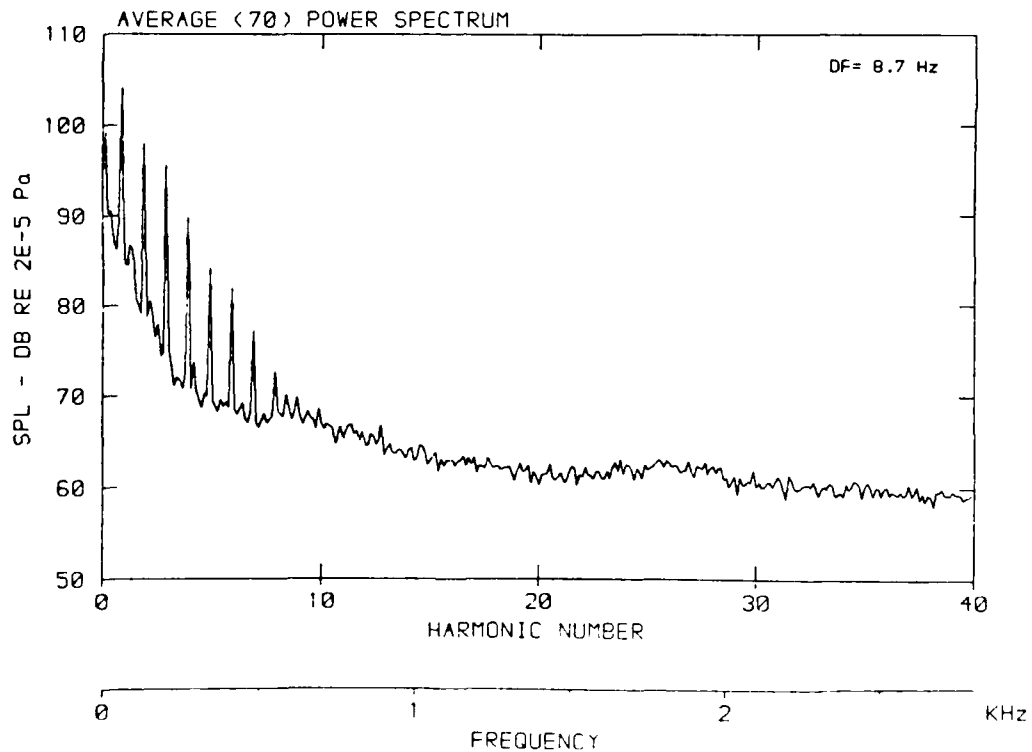
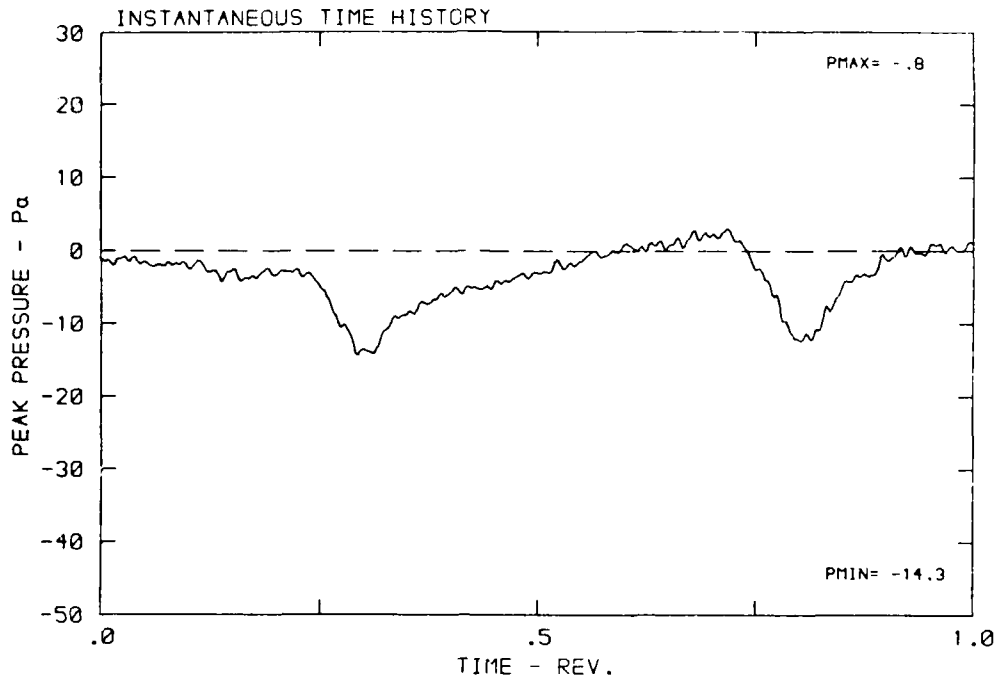
DATA POINT: LC-6 RUN: 138 MP: 9

β : 24.4° MH: .7768 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.4 K



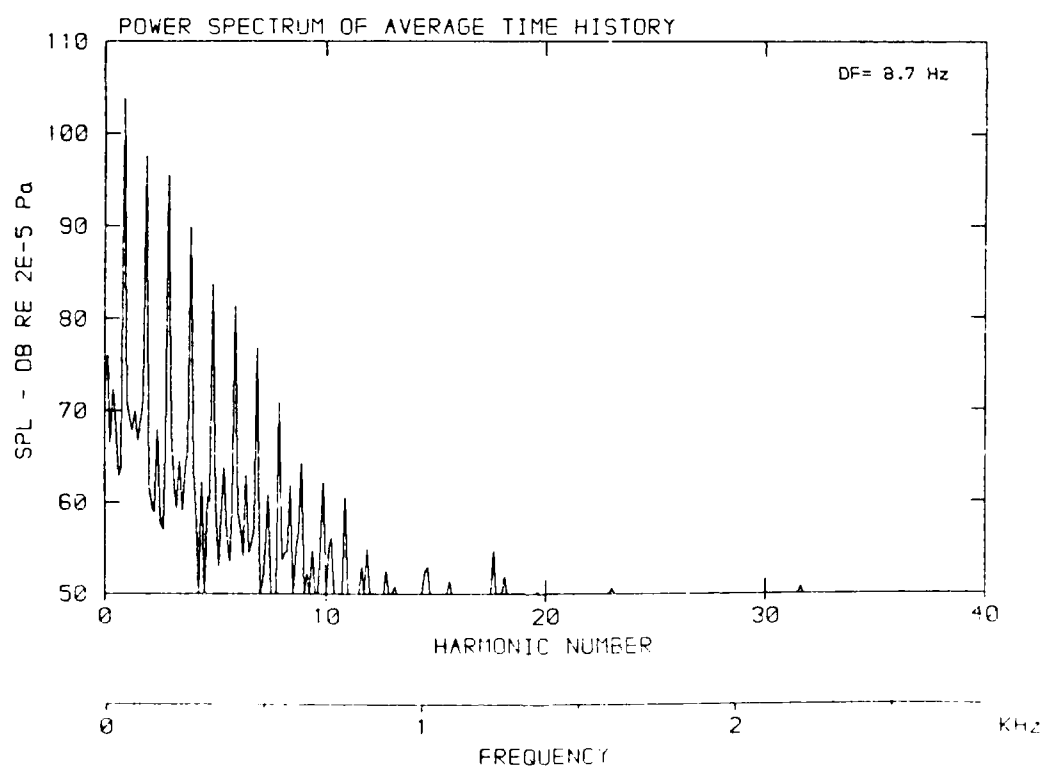
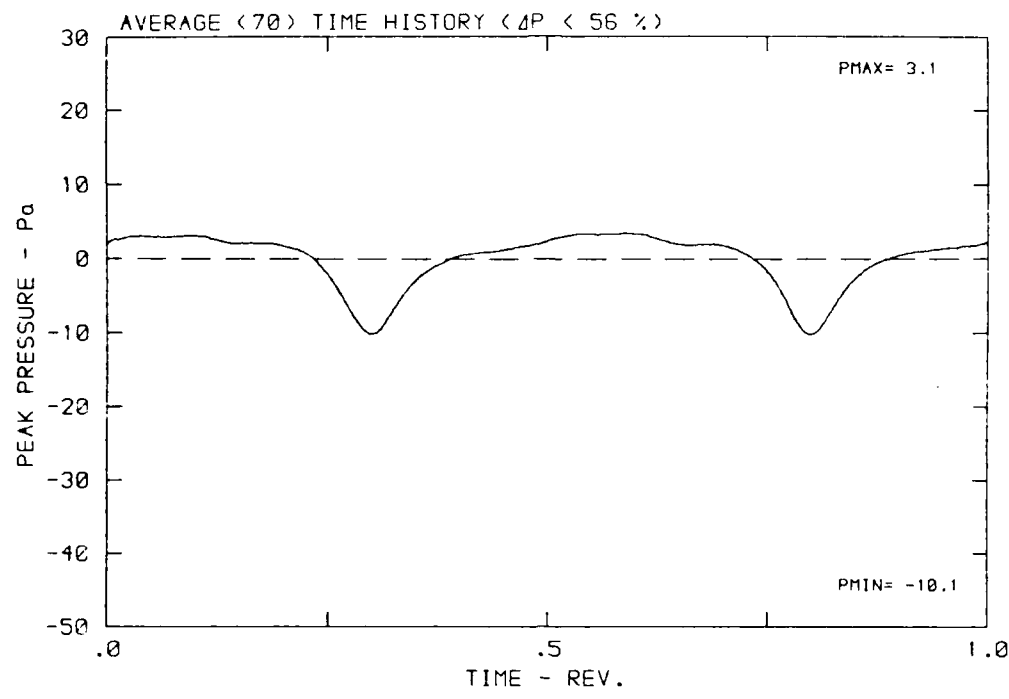
DATA POINT: FC-1 RUN: 127 MP: 1

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



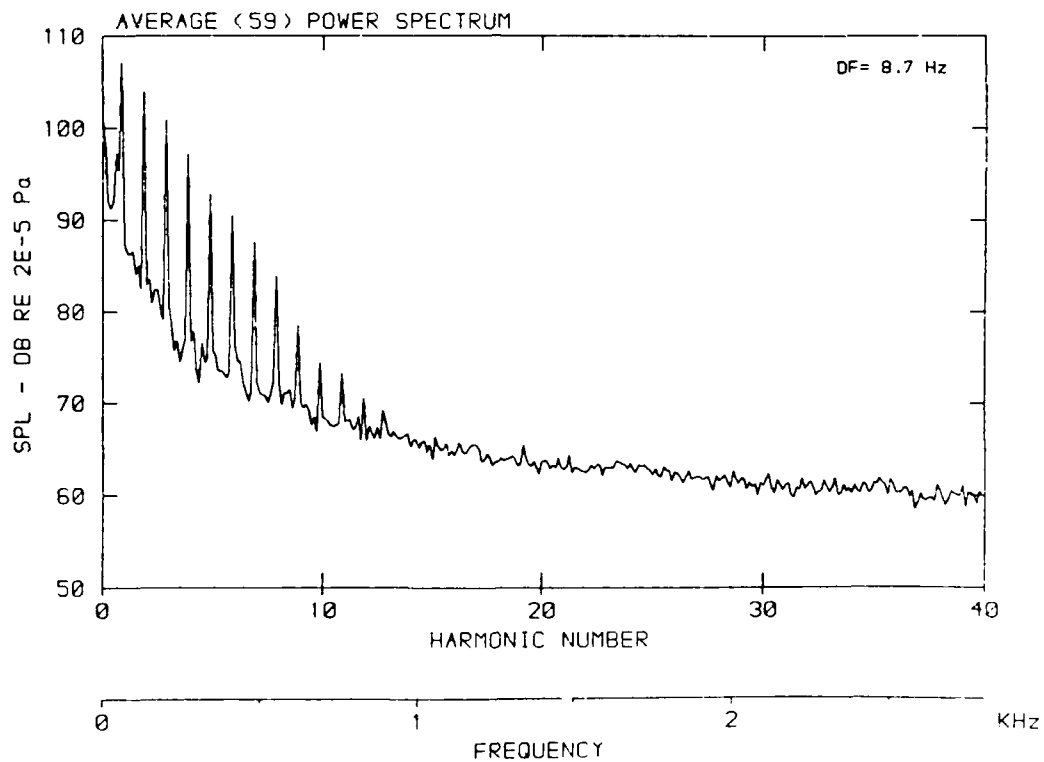
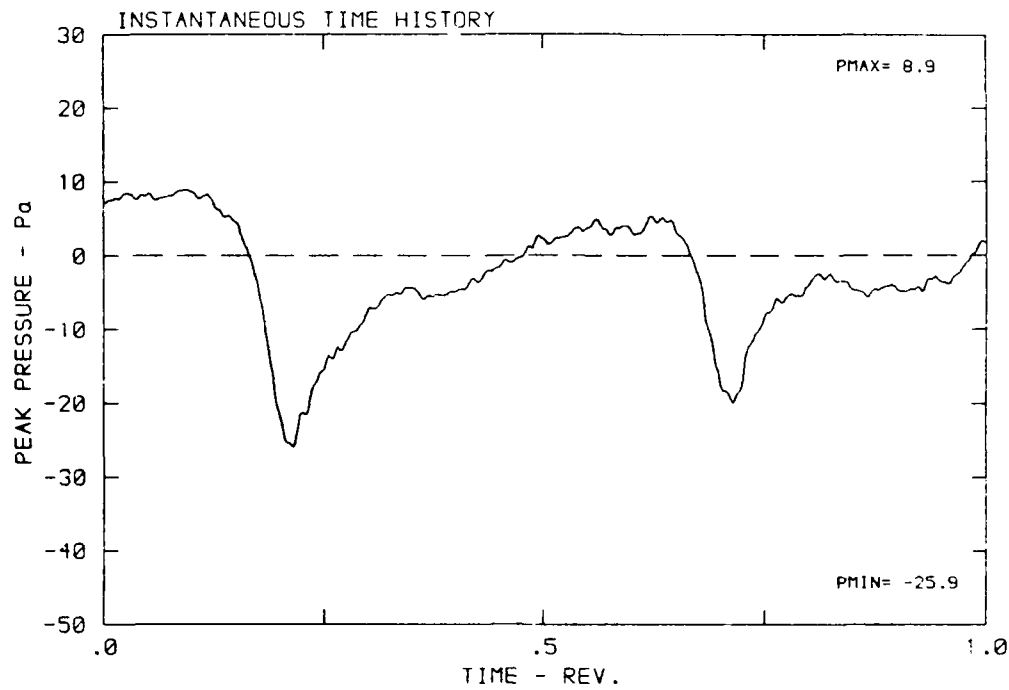
DATA POINT: FC-1 RUN: 127 MP: 1

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.0 K



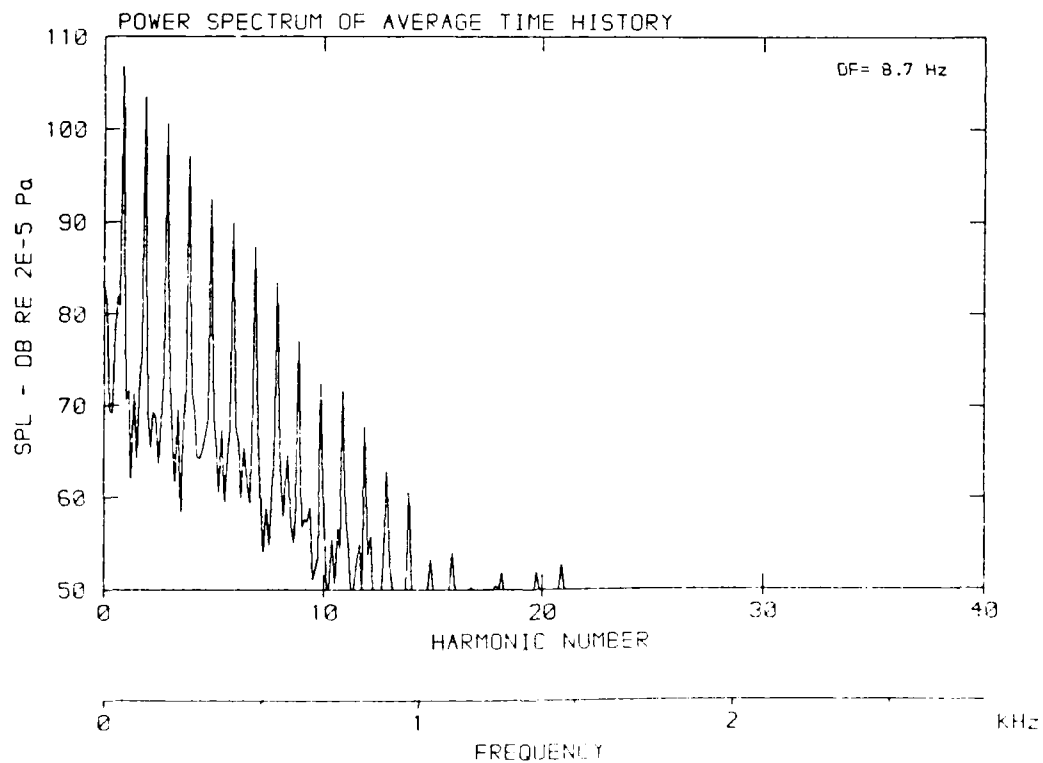
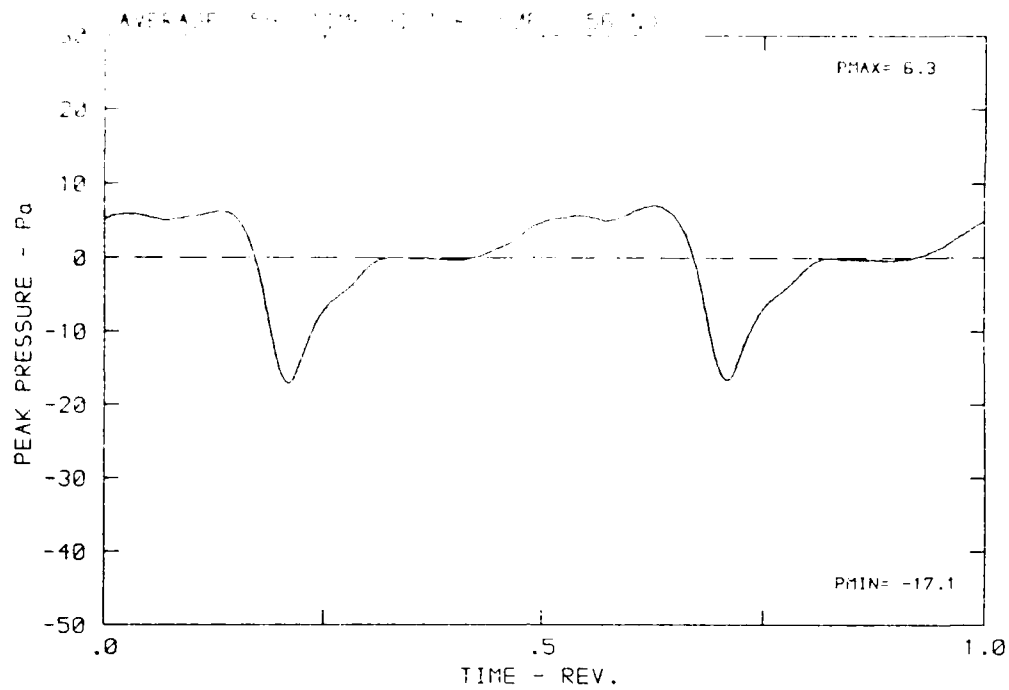
DATA POINT: FC-1 RUN: 127 MP: 2

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



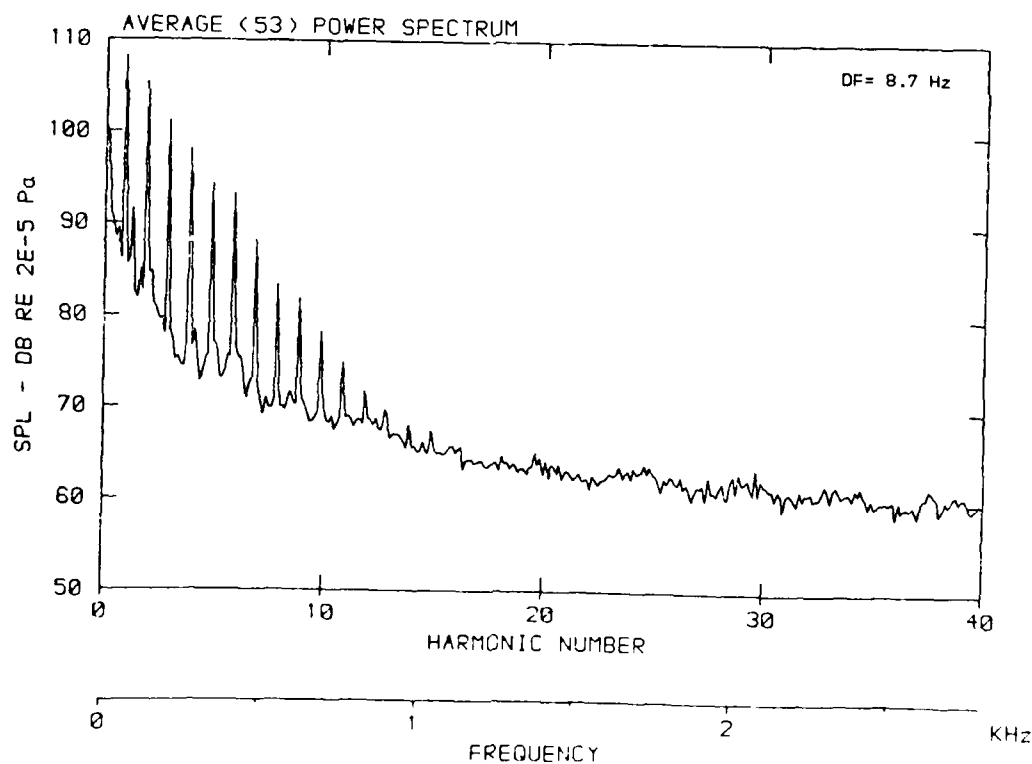
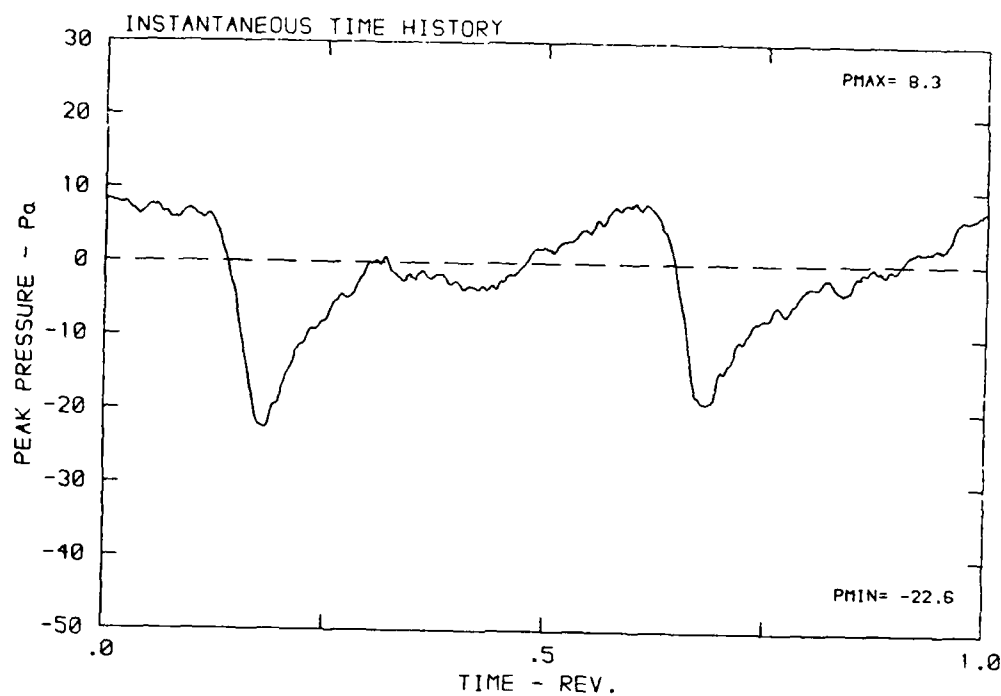
DATA PRINT: 1 RUN: 127 MP: 2

B: 20.79 PH: 1.414 H: 2100 rpm V: .230 ϕ : 3.6° T: 287.8 K



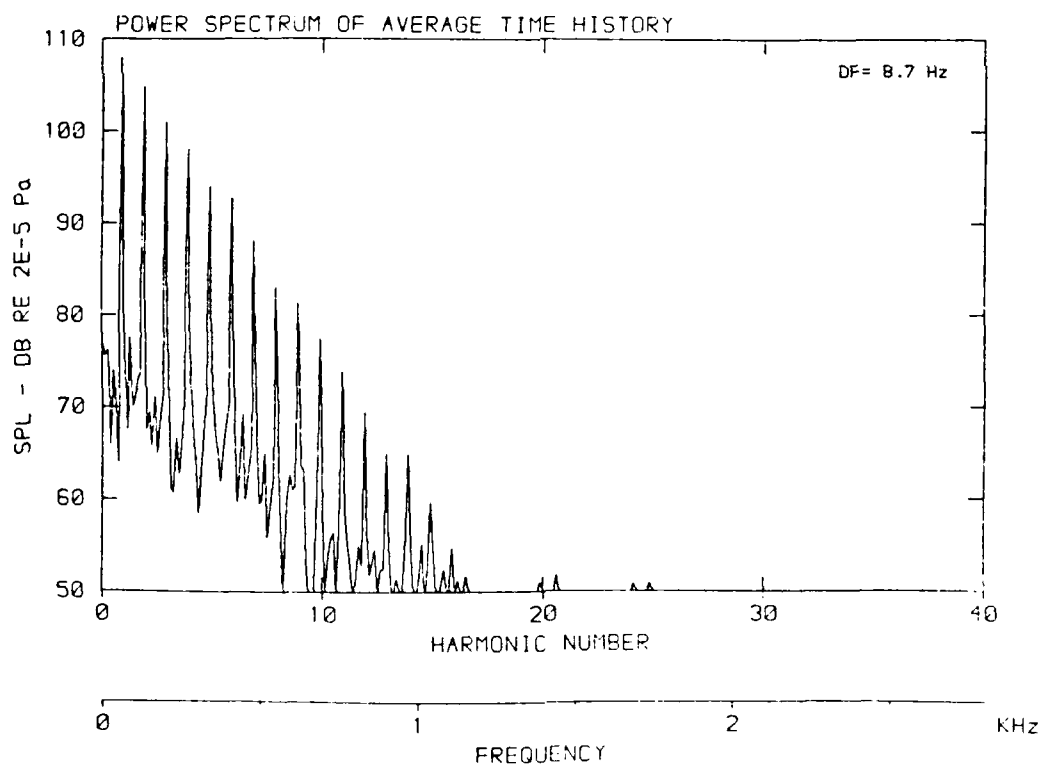
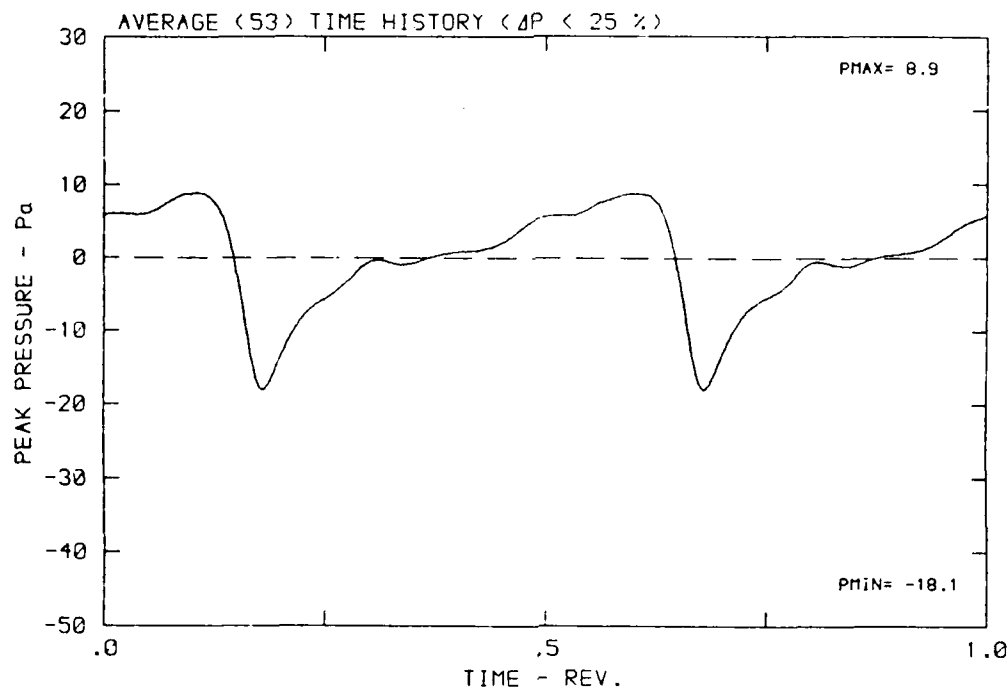
DATA POINT: FC-1 RUN: 127 MP: 3

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.0 K



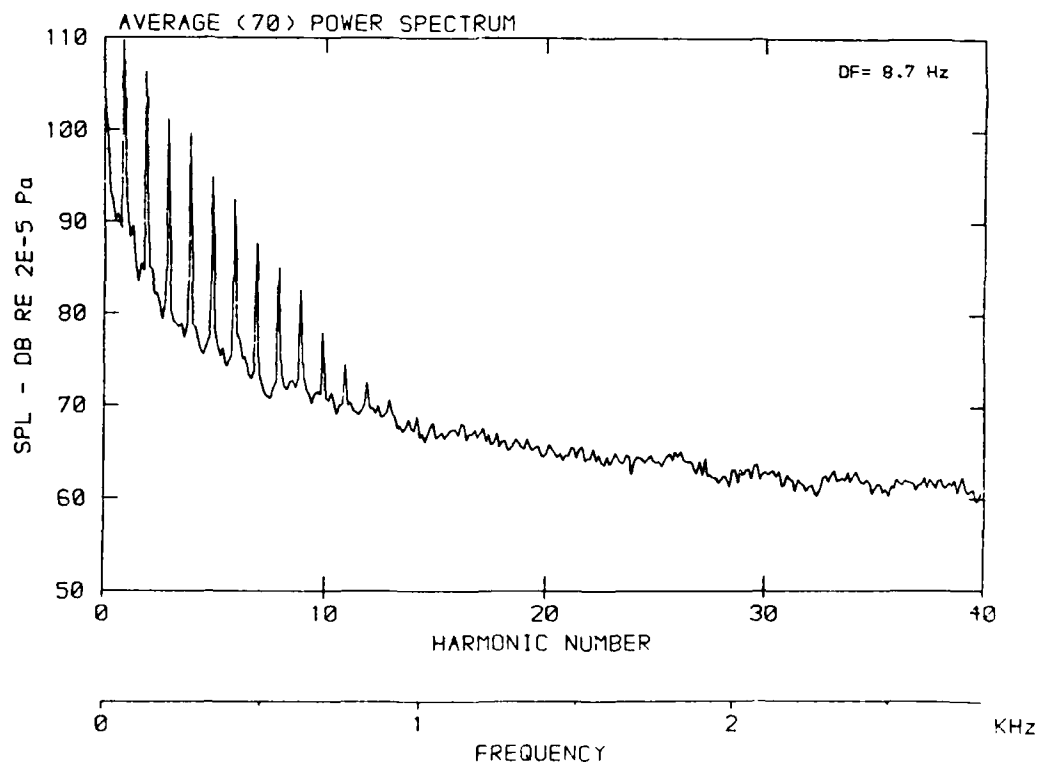
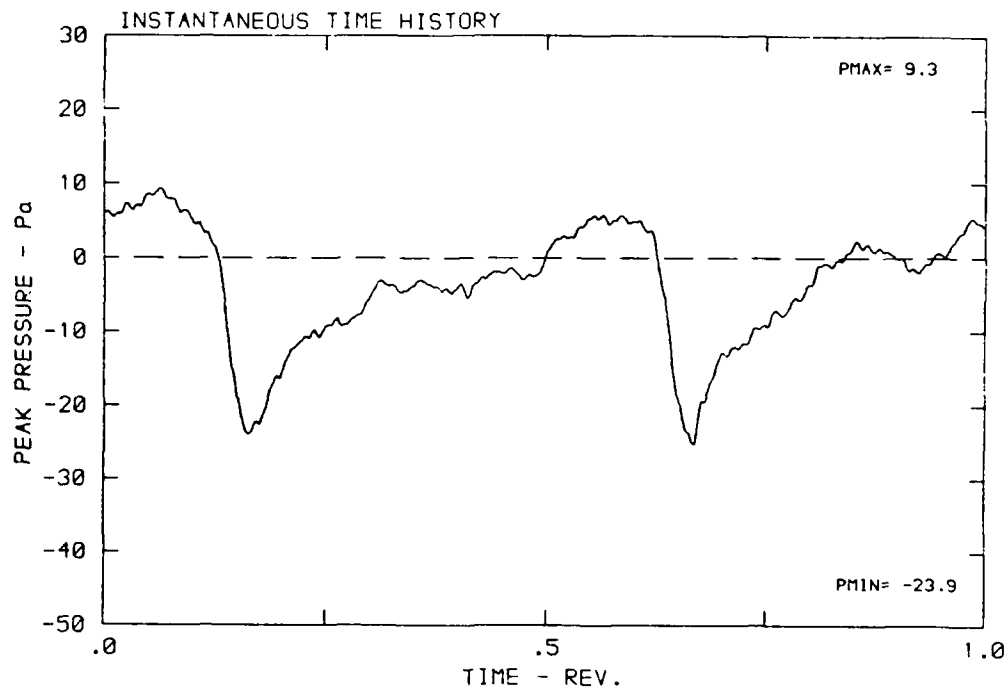
DATA POINT: FC-1 RUN: 127 MP: 3

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



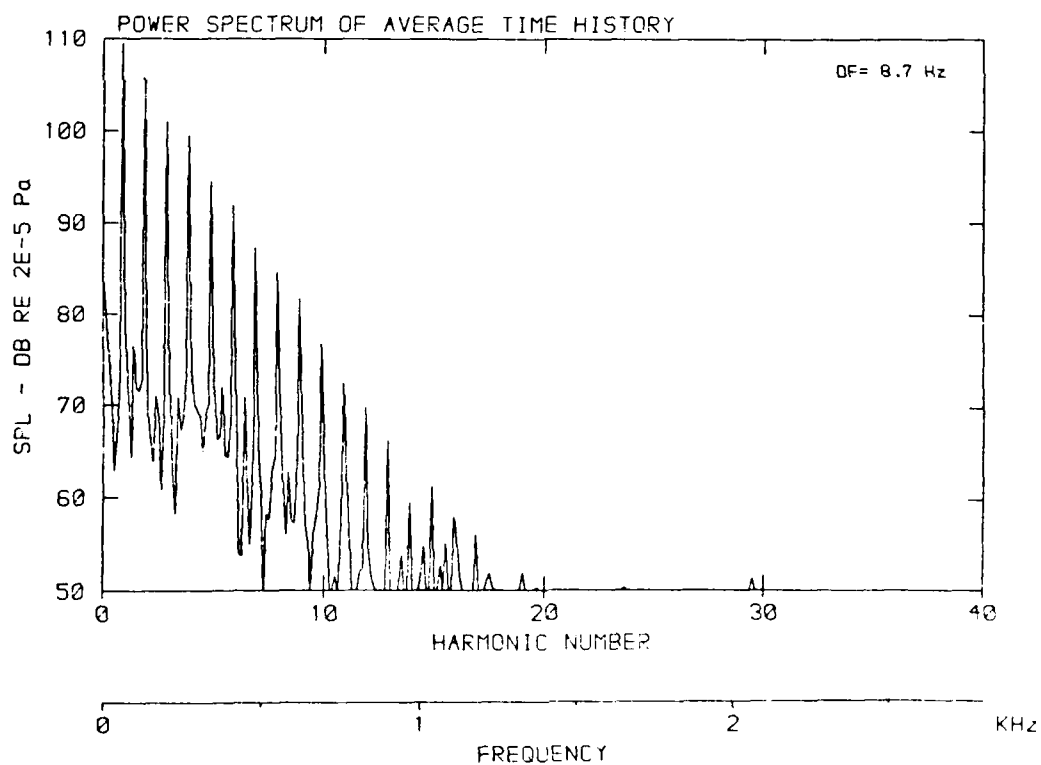
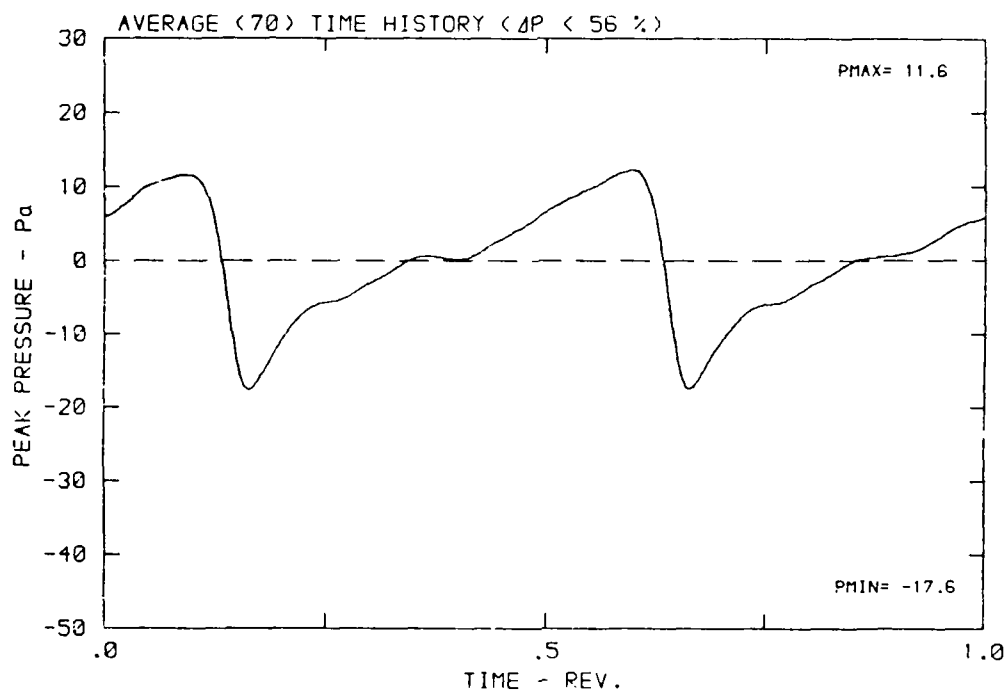
DATA POINT: FC-1 RUN: 127 MP: 4

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 267.0 K



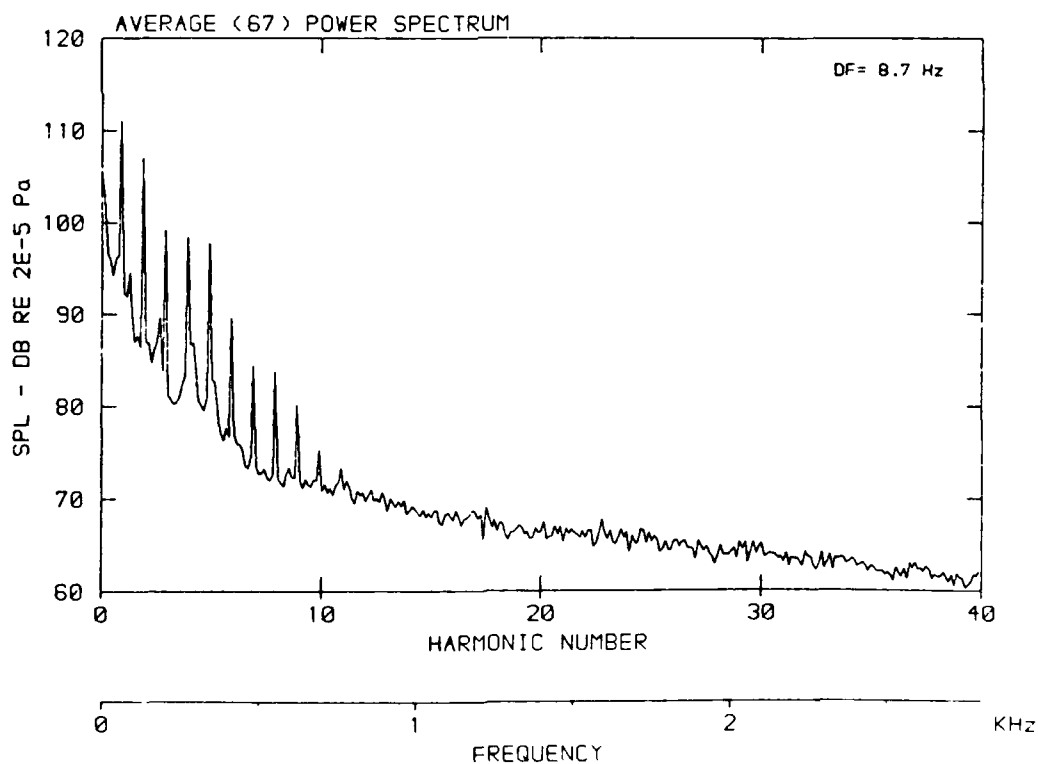
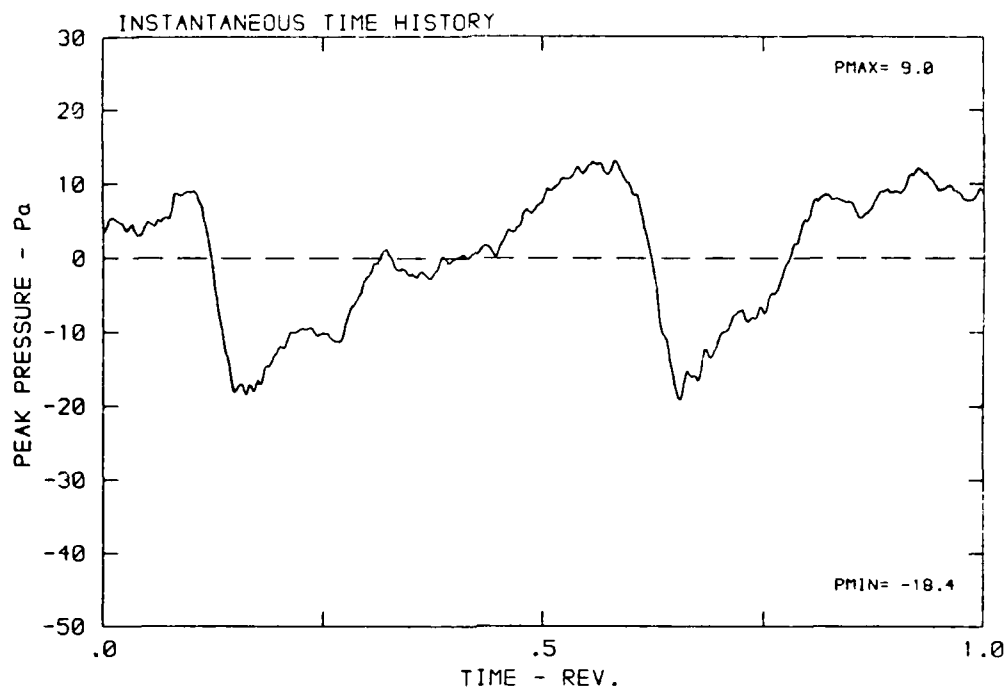
DATA POINT: FC-1 RUN: 127 MP: 4

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



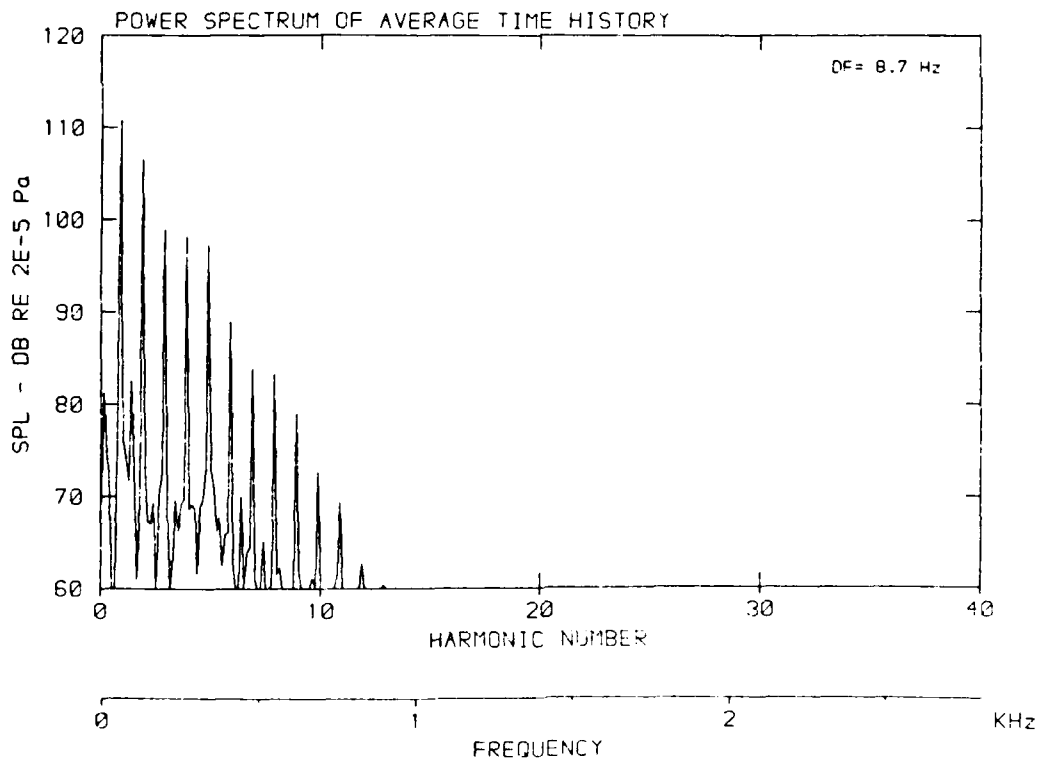
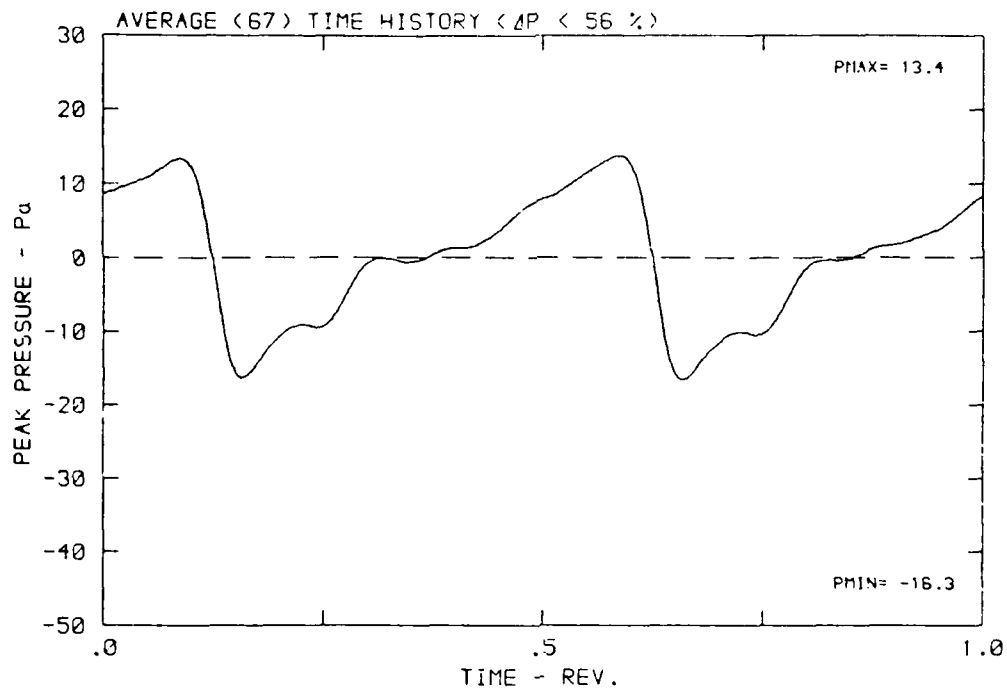
DATA POINT: FC-1 RUN: 127 MP: 5

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



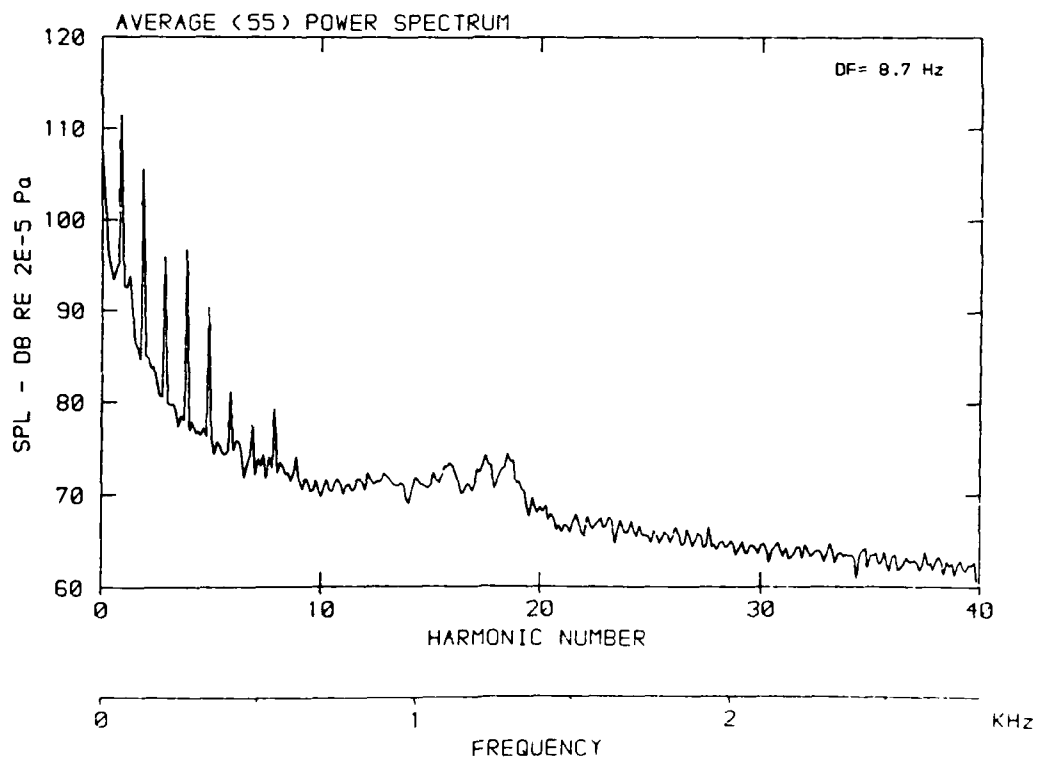
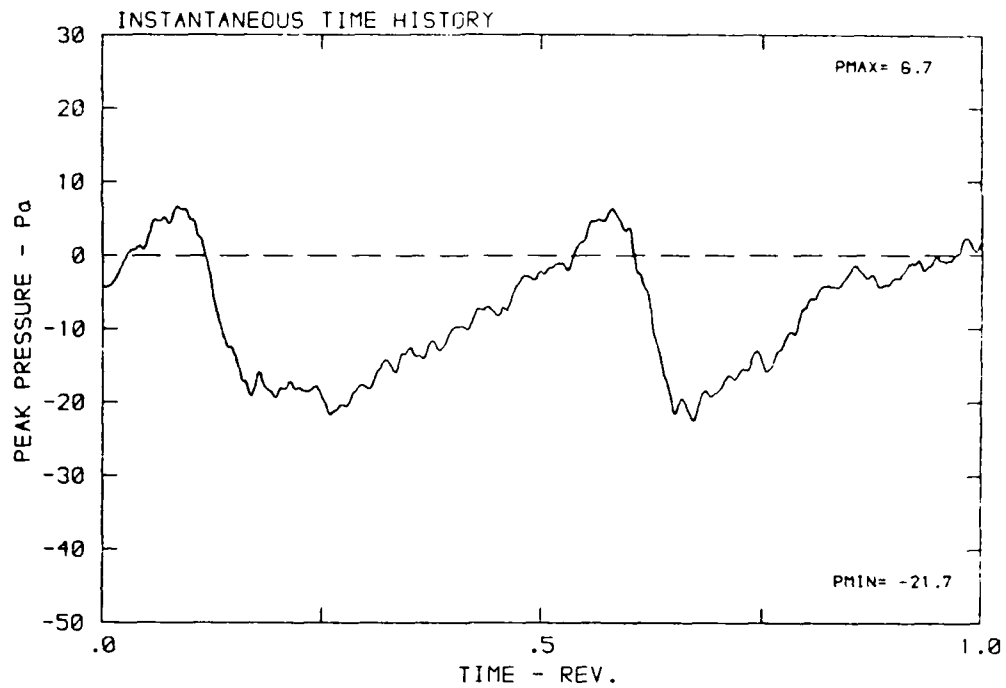
DATA POINT: FC-1 RUN: 127 MP: 5

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



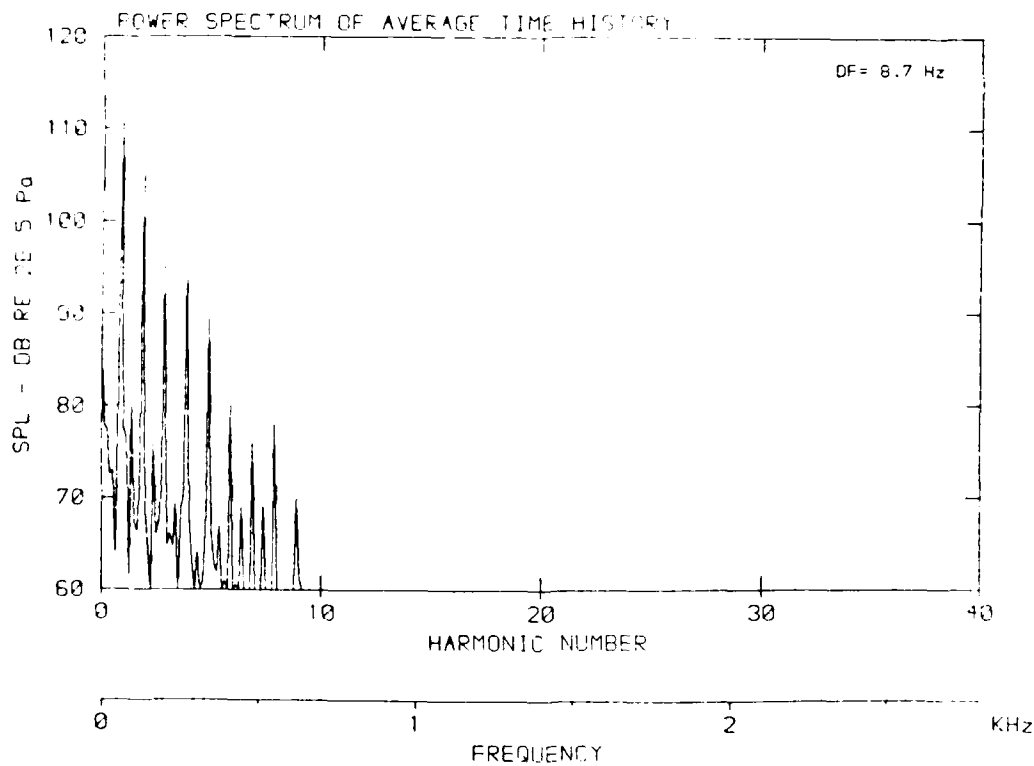
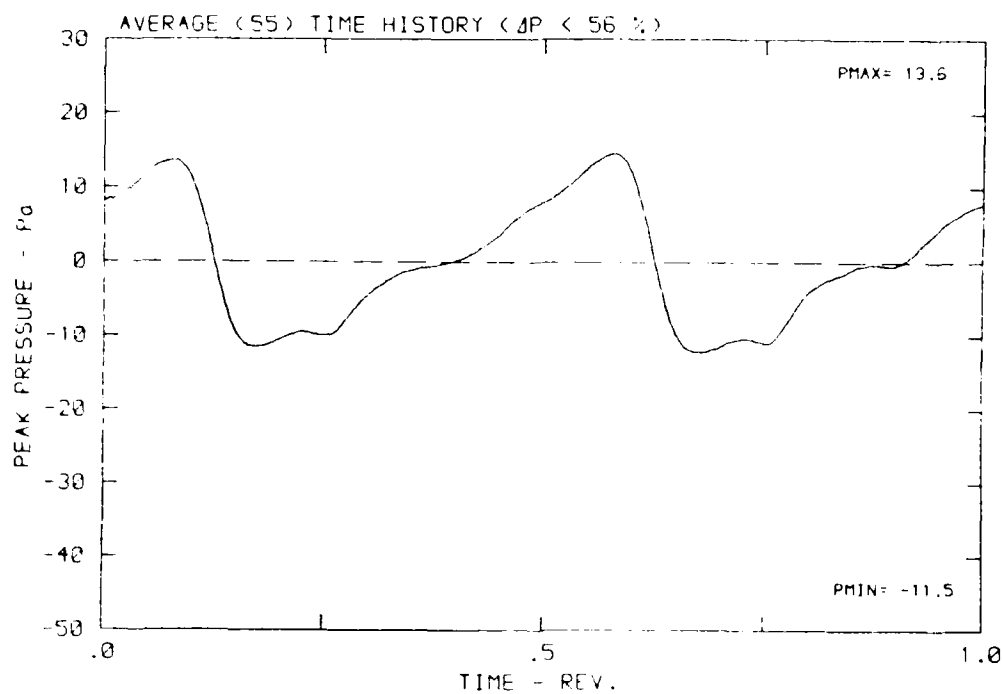
DATA POINT: FC-1 RUN: 127 MP: 6

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.7° K



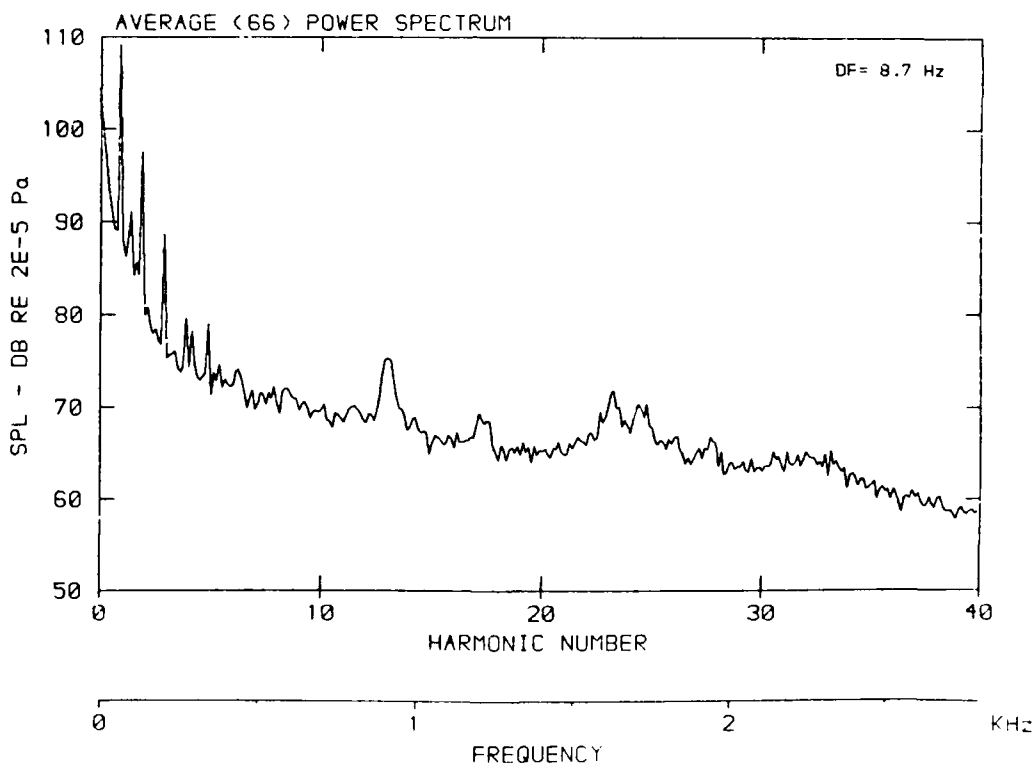
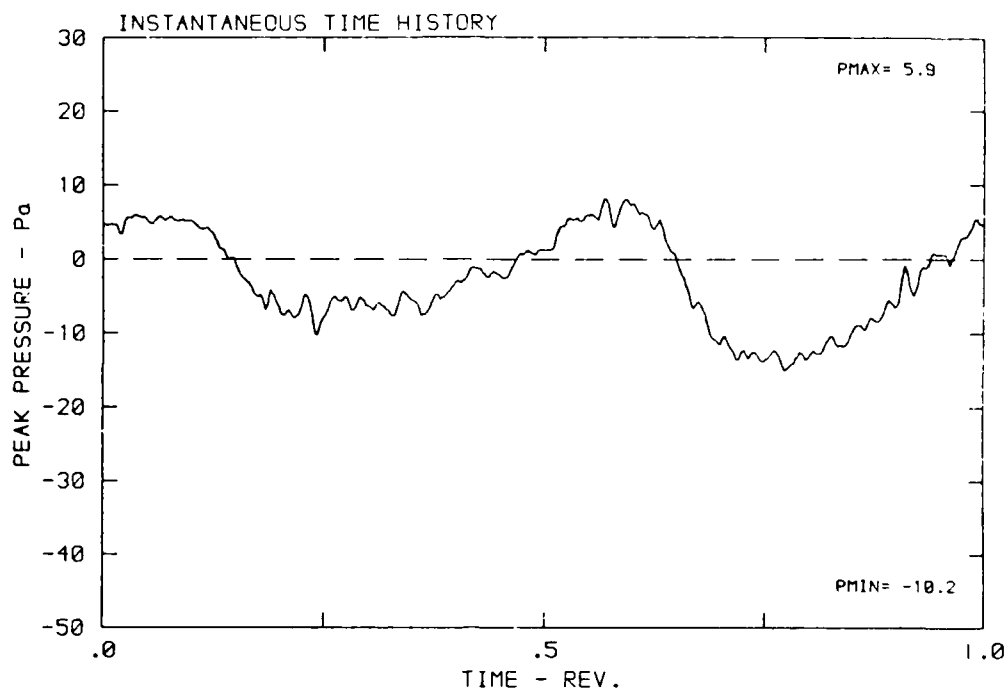
DATA POINT: FC-1 RUN: 127 MP: 6

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.0 K



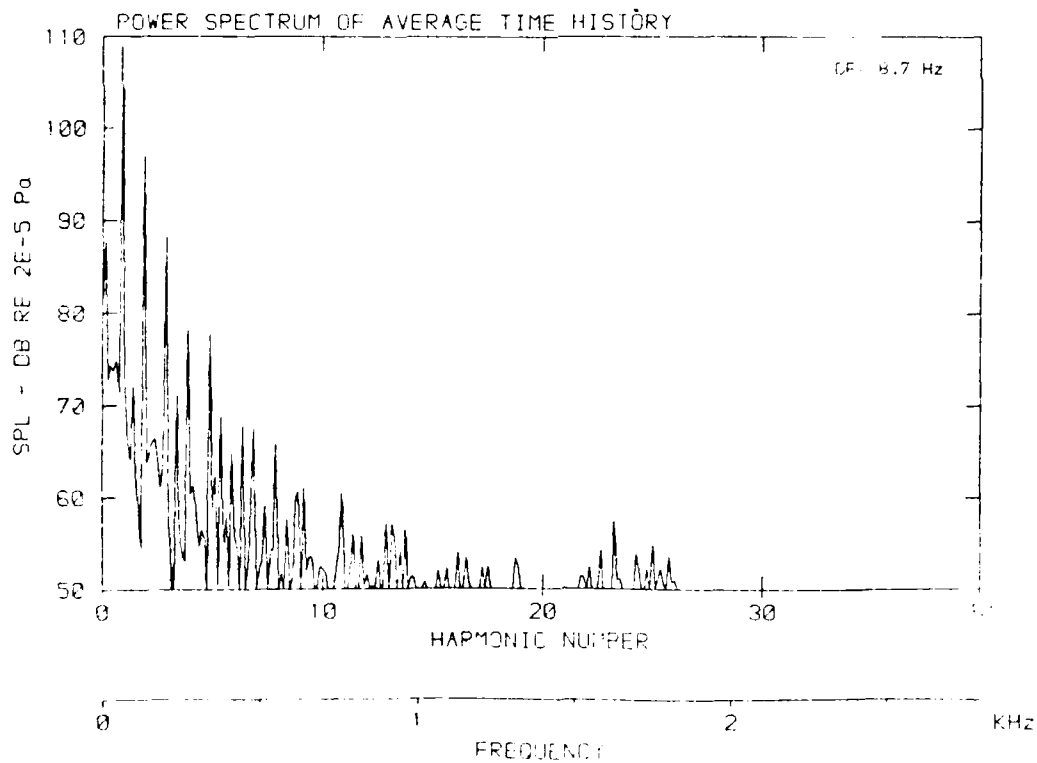
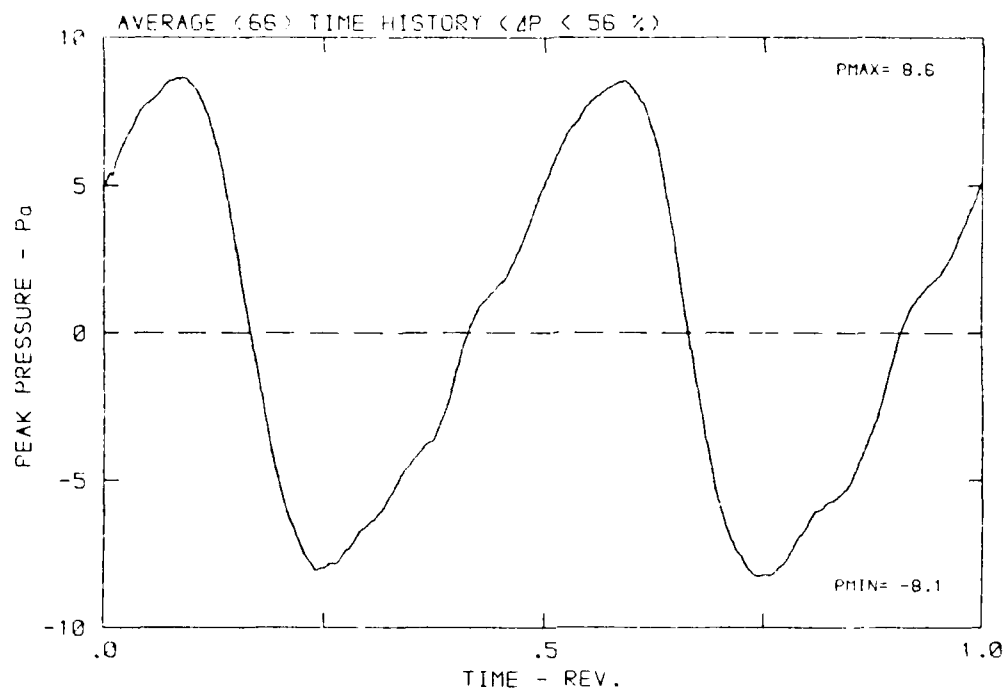
DATA POINT: FC-1 RUN: 127 MP: 7

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.0 K



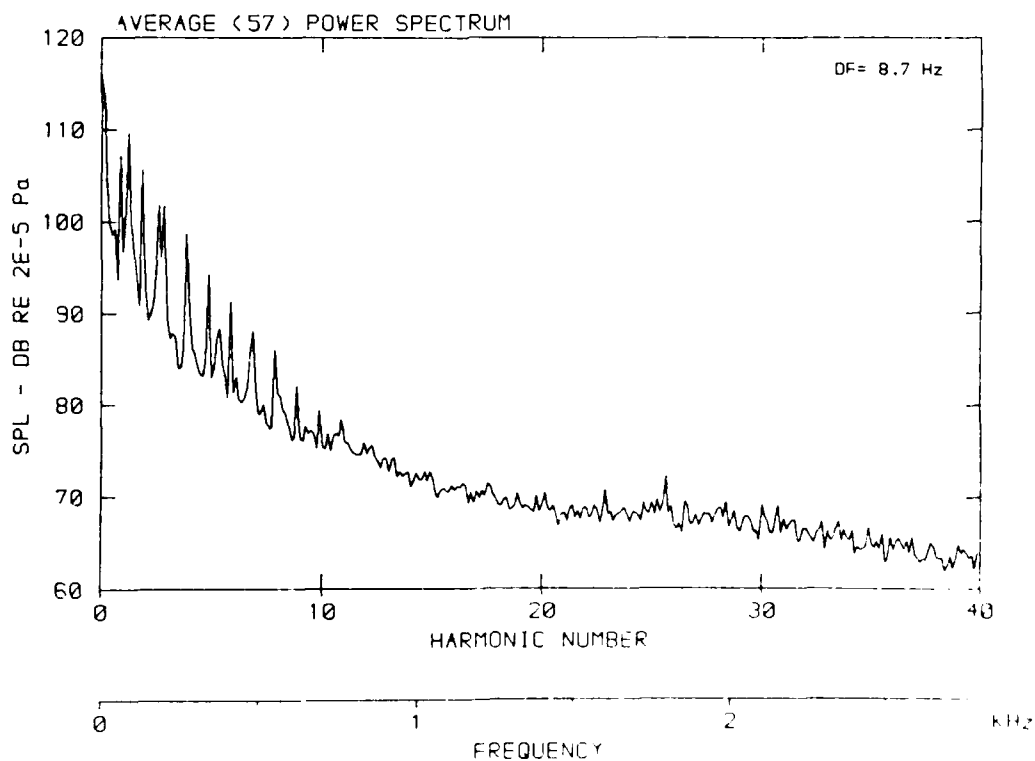
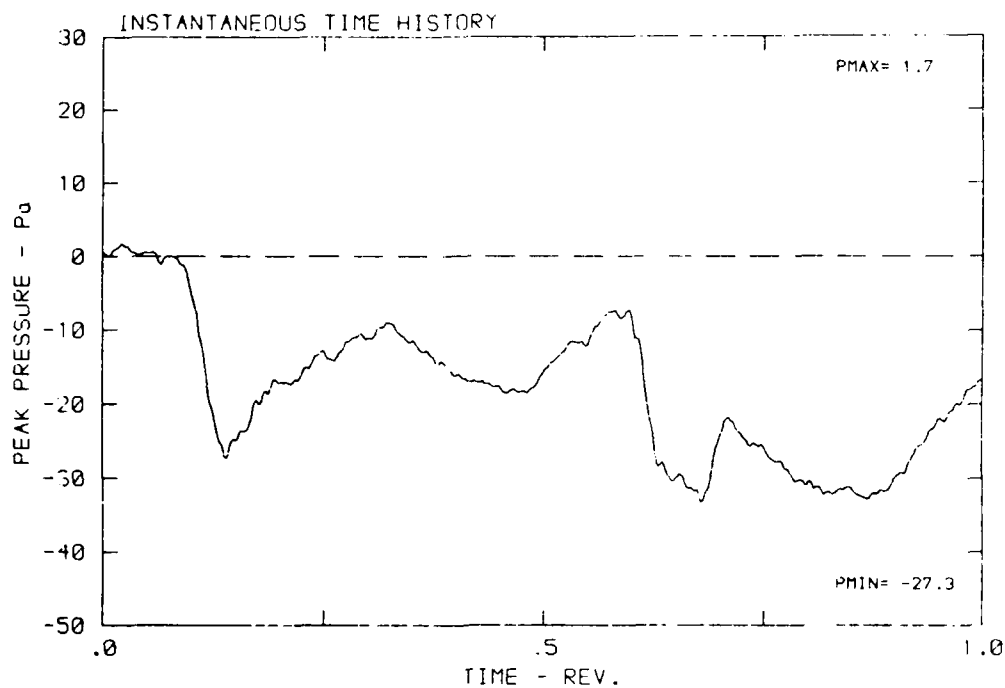
DATA POINT: FC-1 RUN: 127 MP: 7

β : 20.7° MH: .6749 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 287.0 K



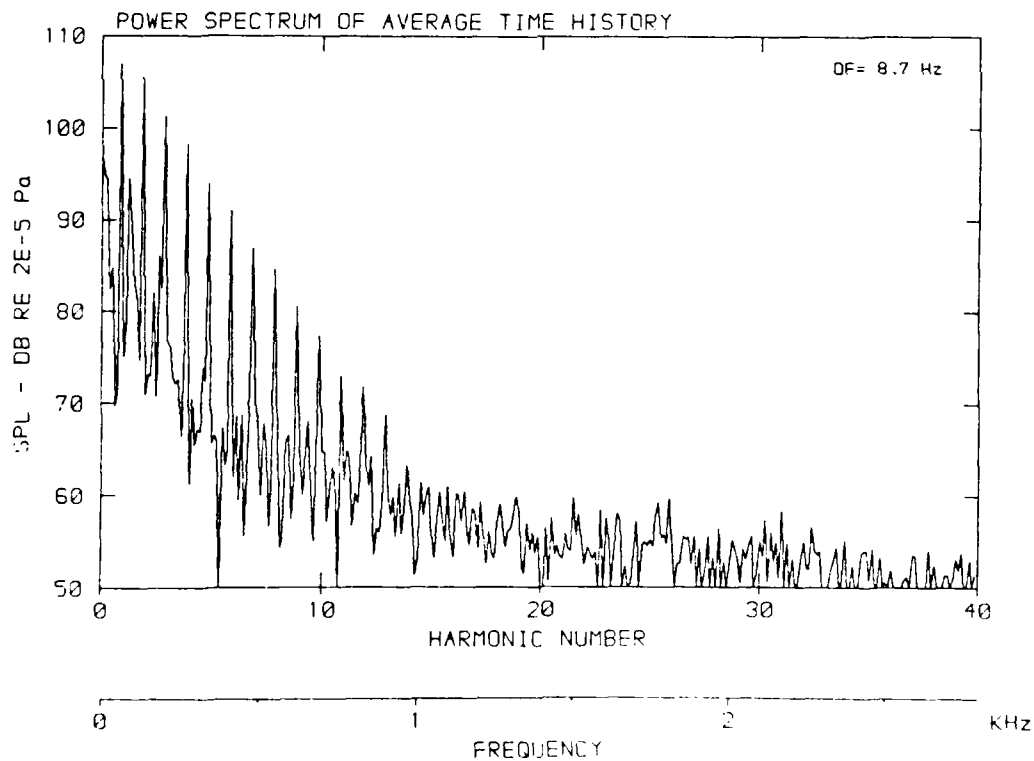
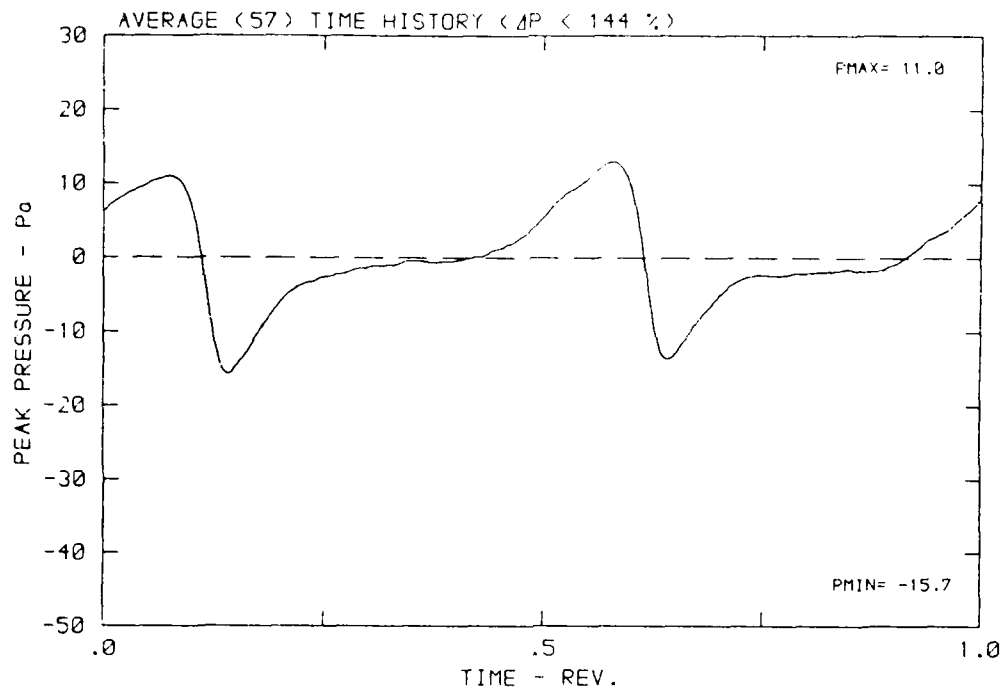
DATA POINT: FC-1 RUN: 127 MP: 8

β : 20.7° MH: .6749 n: 2100 rpm v_{ru} : .230 ϕ : 3.6° T: 287.0 K



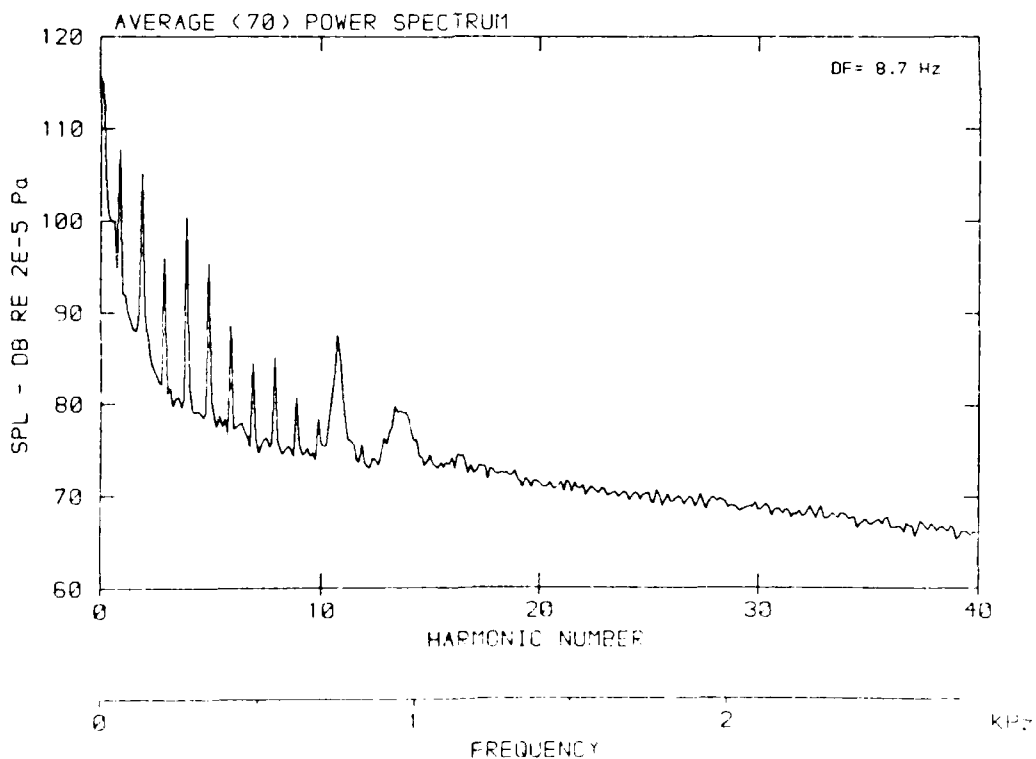
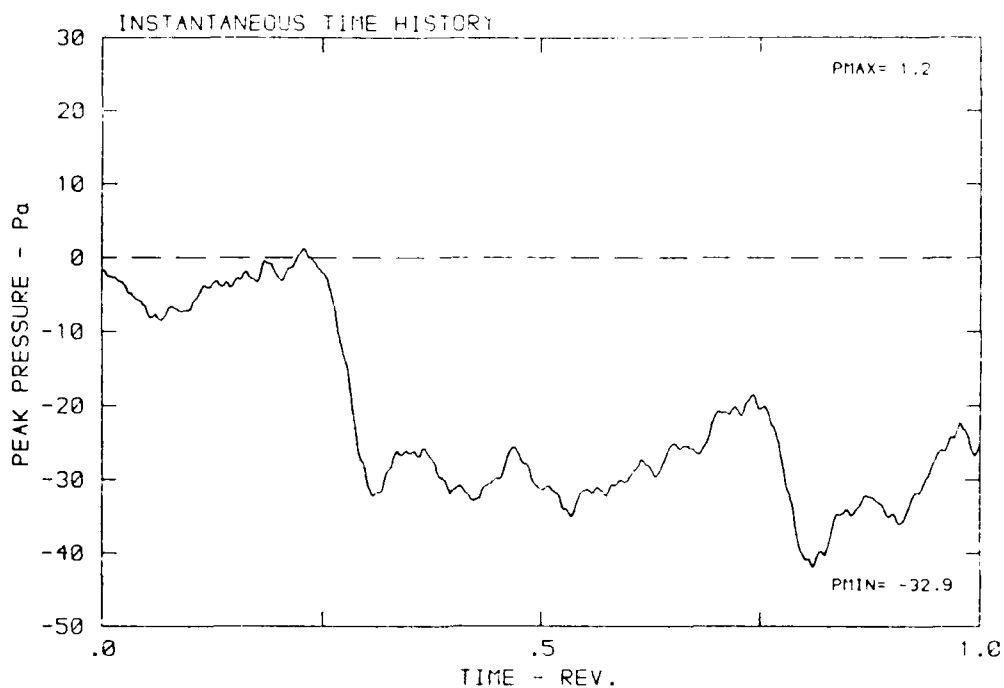
DATA POINT: FC-1 RUN: 127 MP: 8

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.0 K



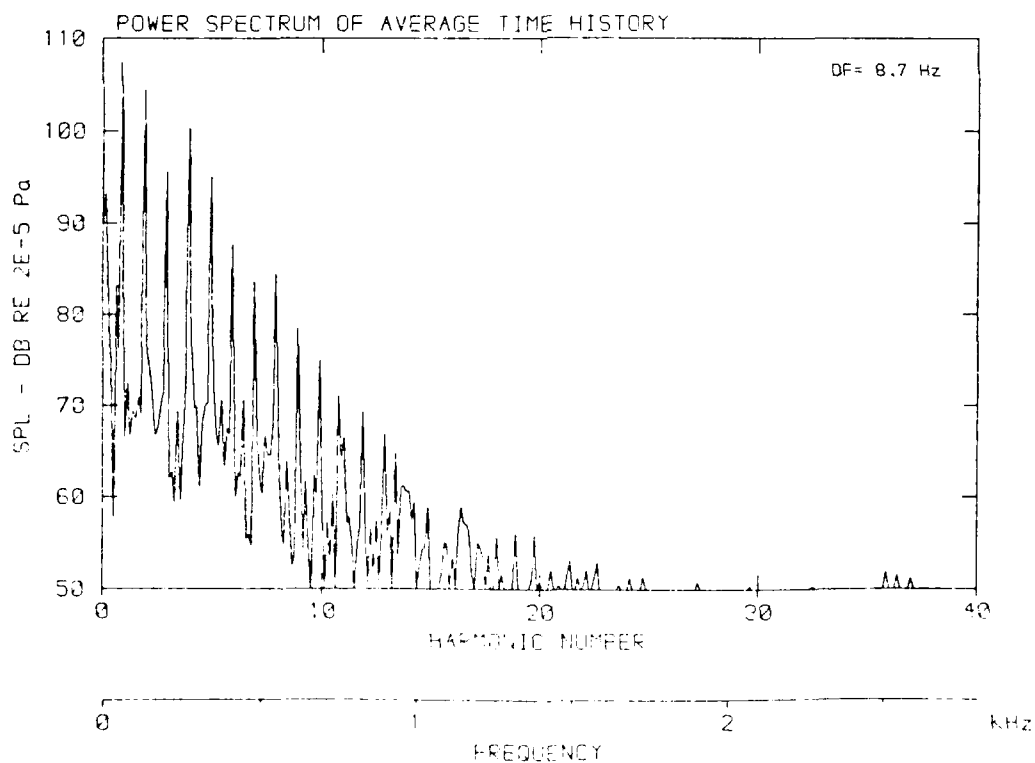
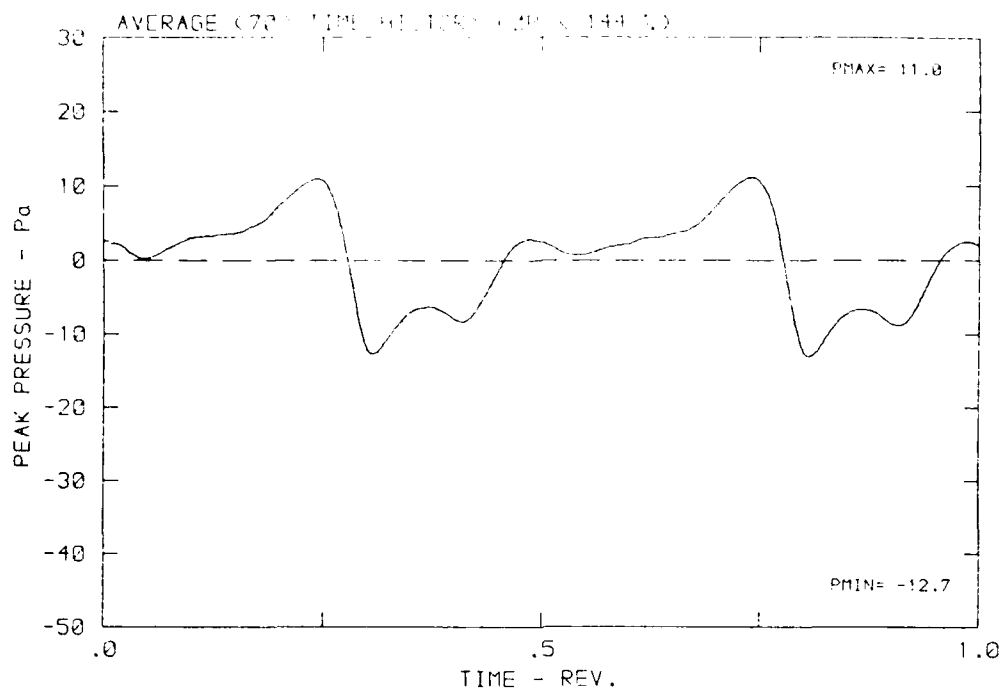
DATA POINT: FC-1 RUN: 127 MP: 9

β : 20.7° MH: .6749 n: 2100 rpm v_{20} : .730 ϕ : 3.6° T: 257.0 s



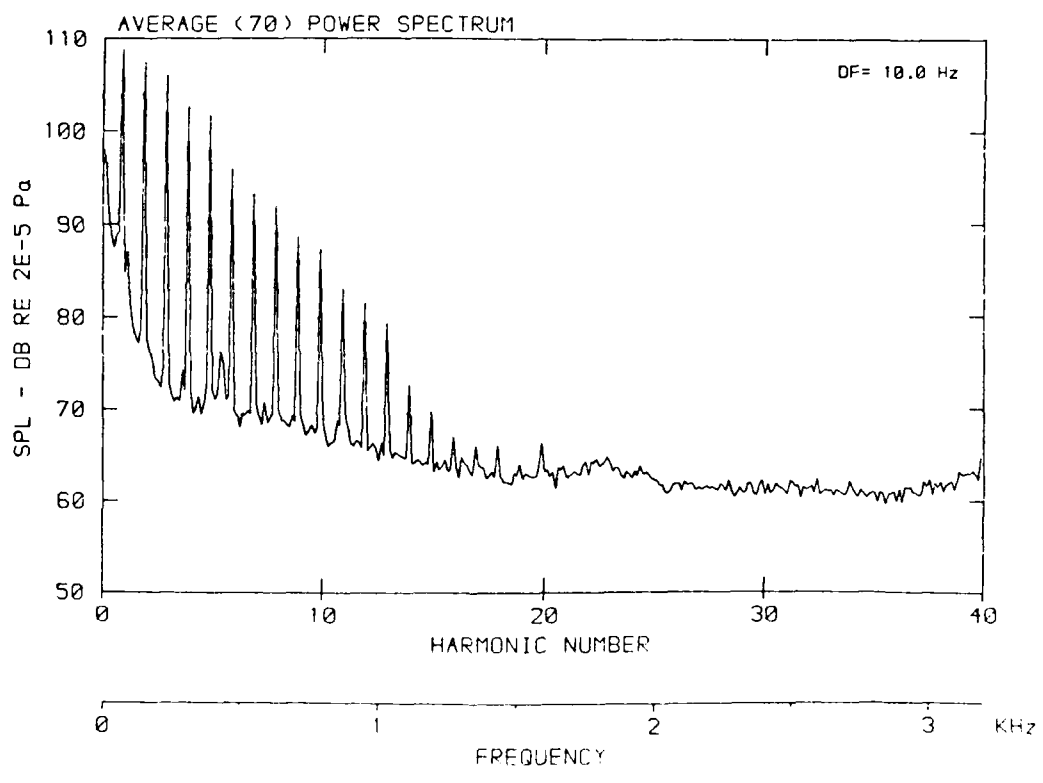
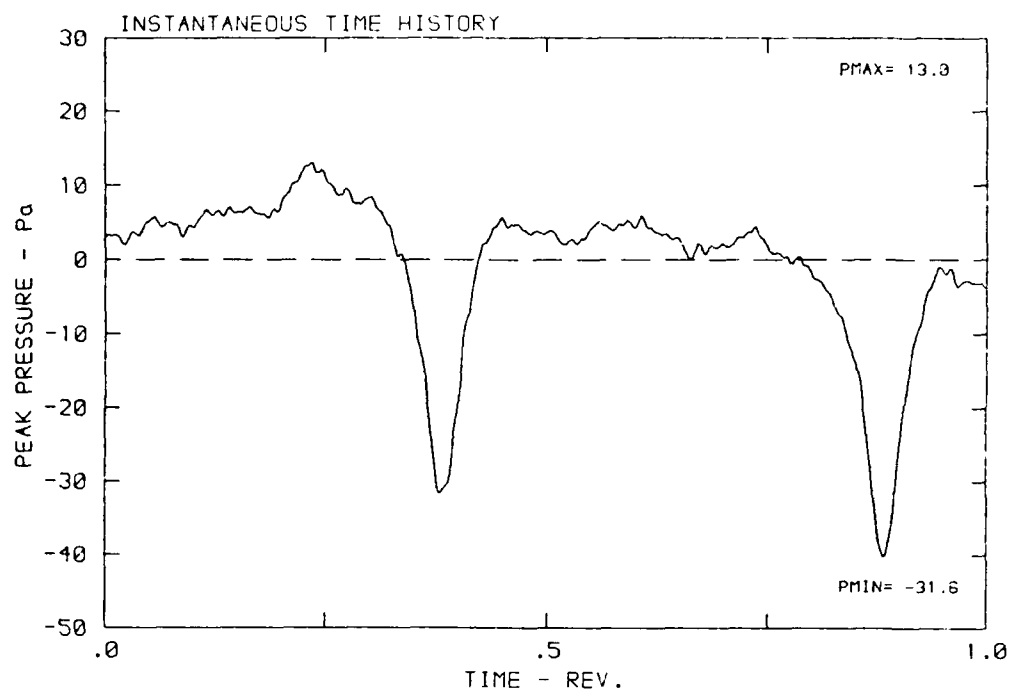
DATA POINT: 1 RUN: 127 MP: 9

β : 20.7° MH: .6749 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 287.0 K



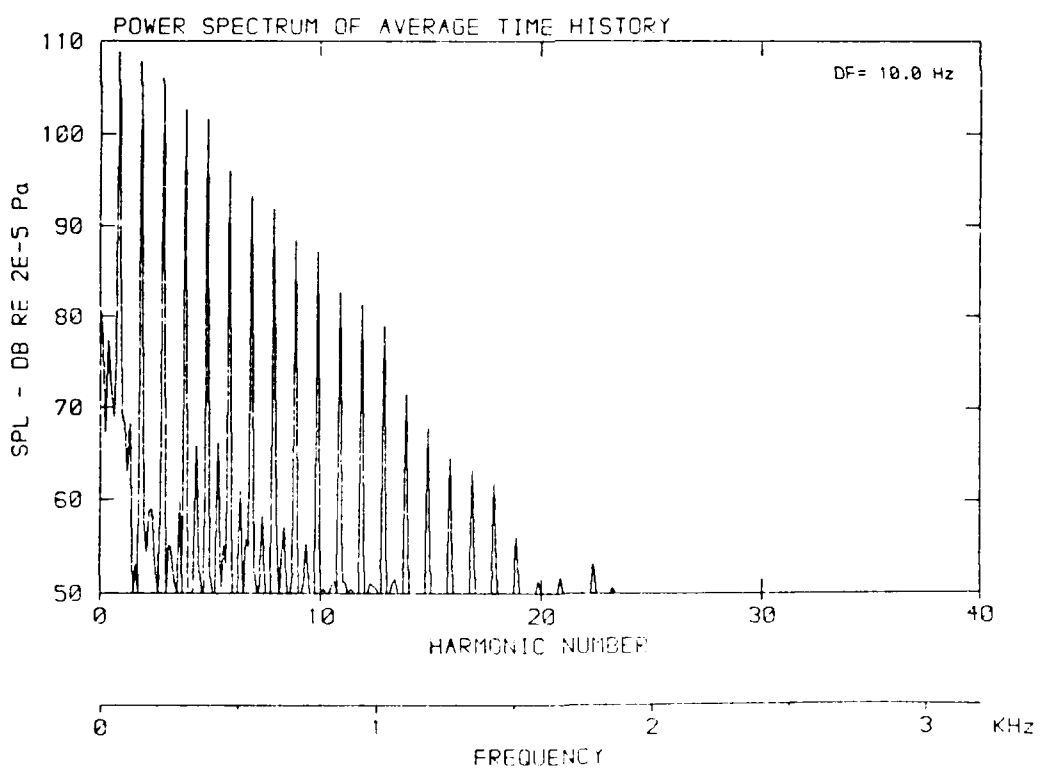
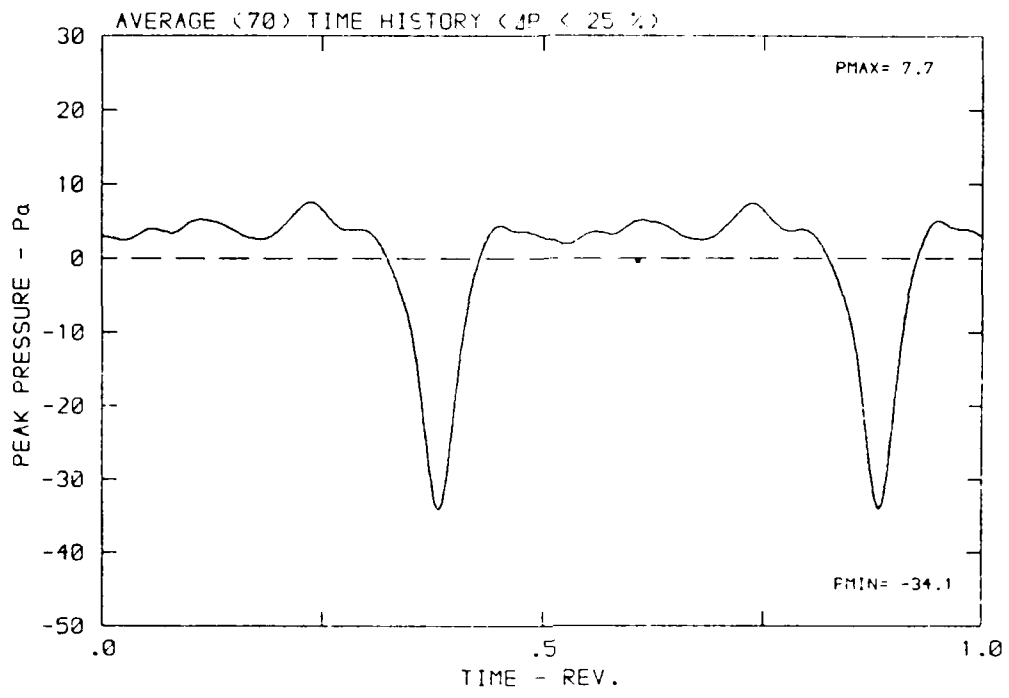
DATA POINT: FC-2 RUN: 128 MP: 1

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3 K



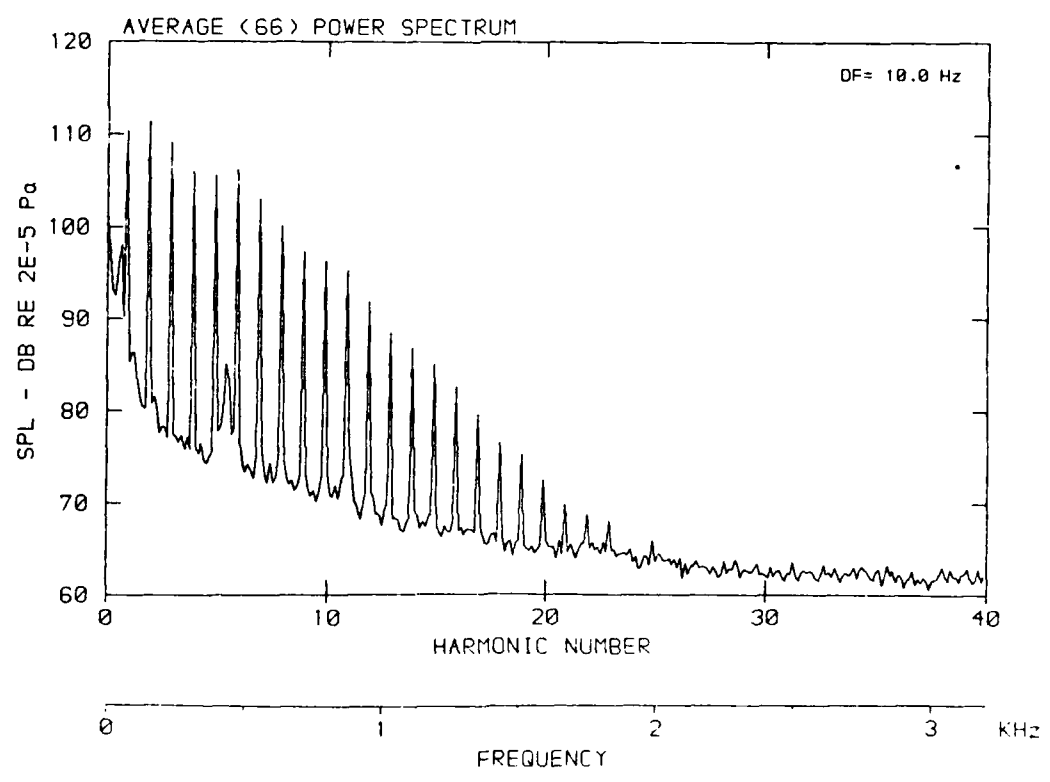
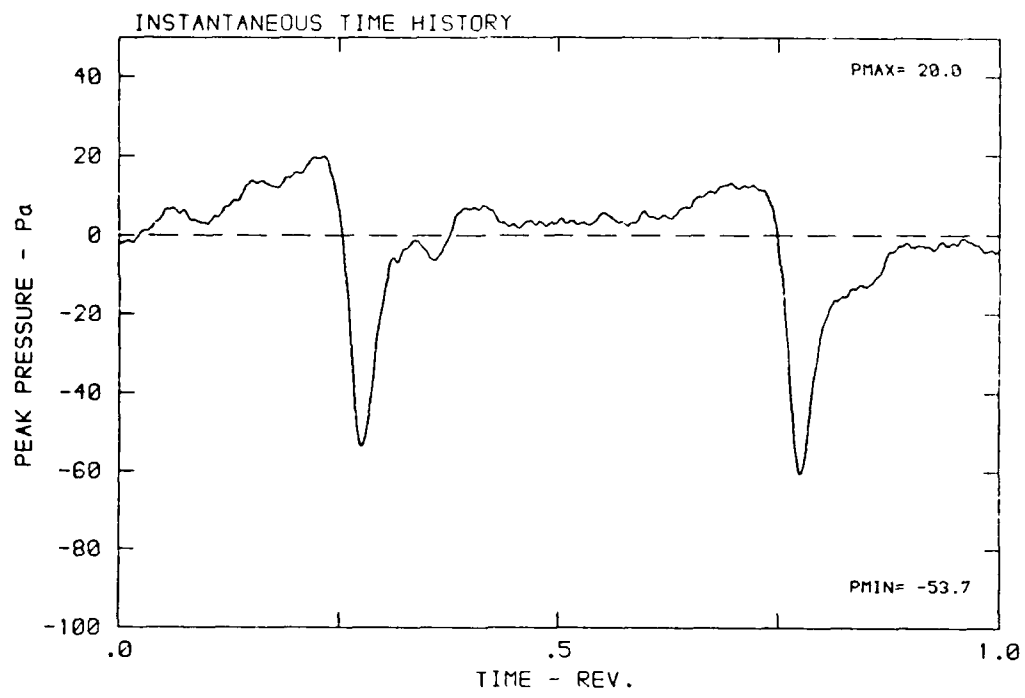
DATA POINT: FC-2 RUN: 128 MP: 1

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



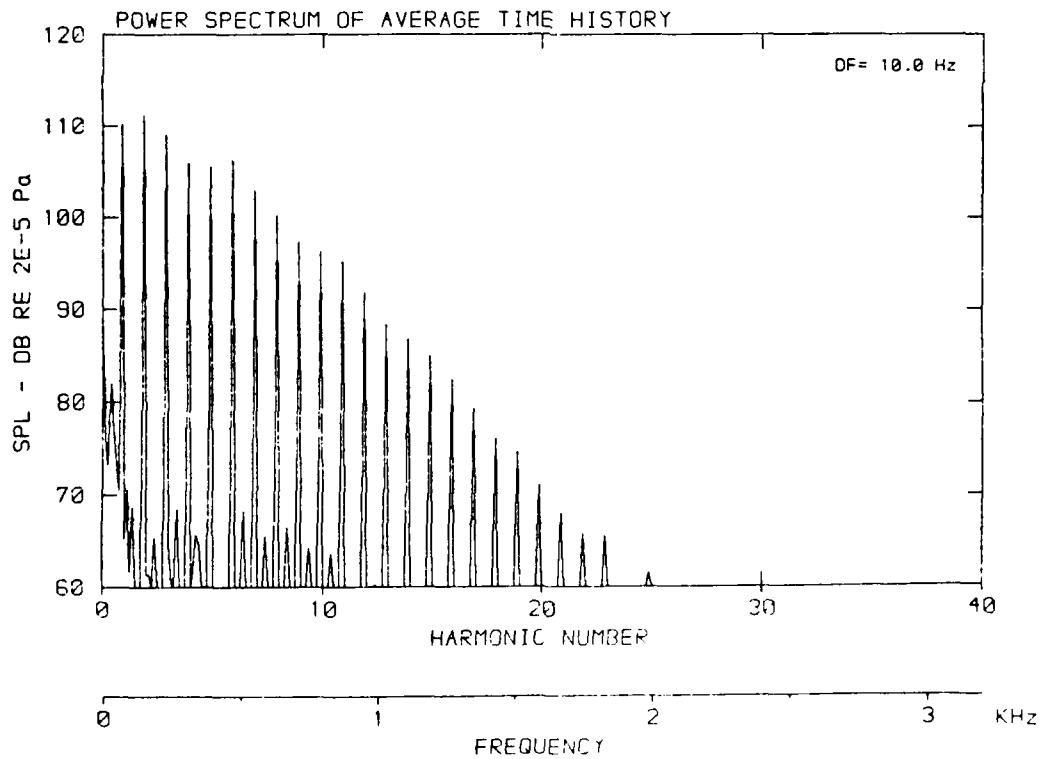
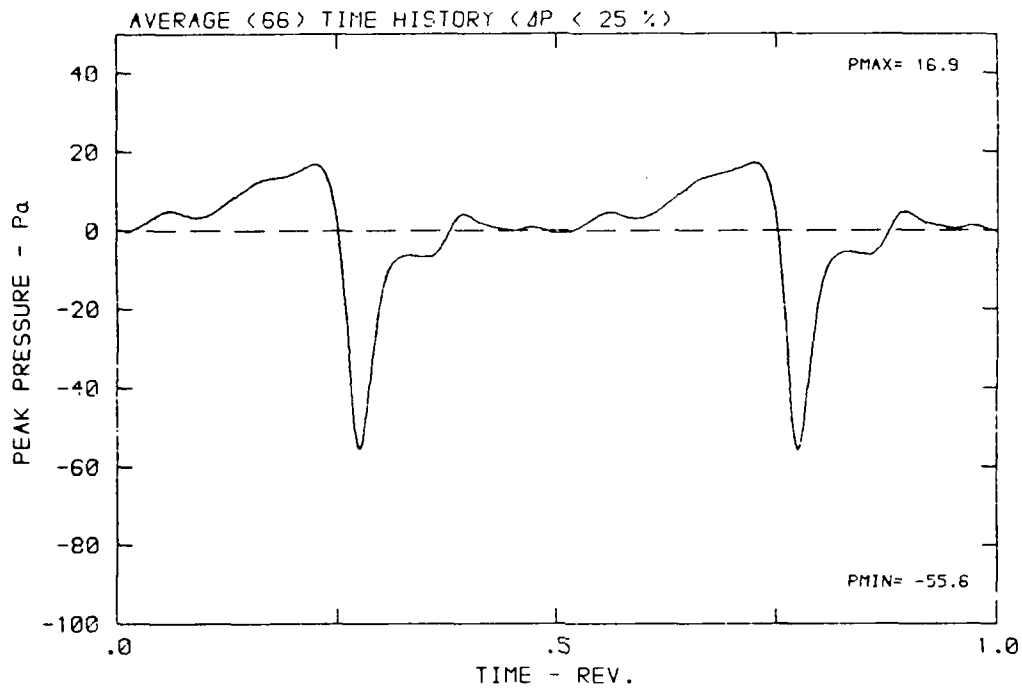
DATA POINT: FC-2 RUN: 128 MP: 2

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3 K



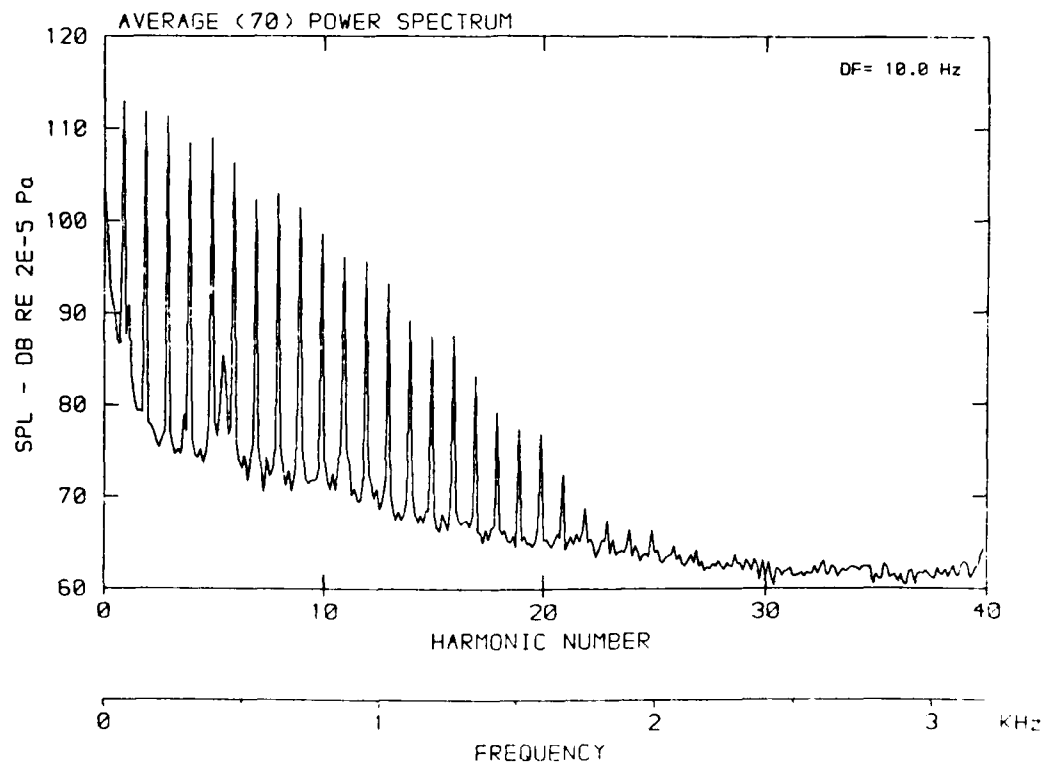
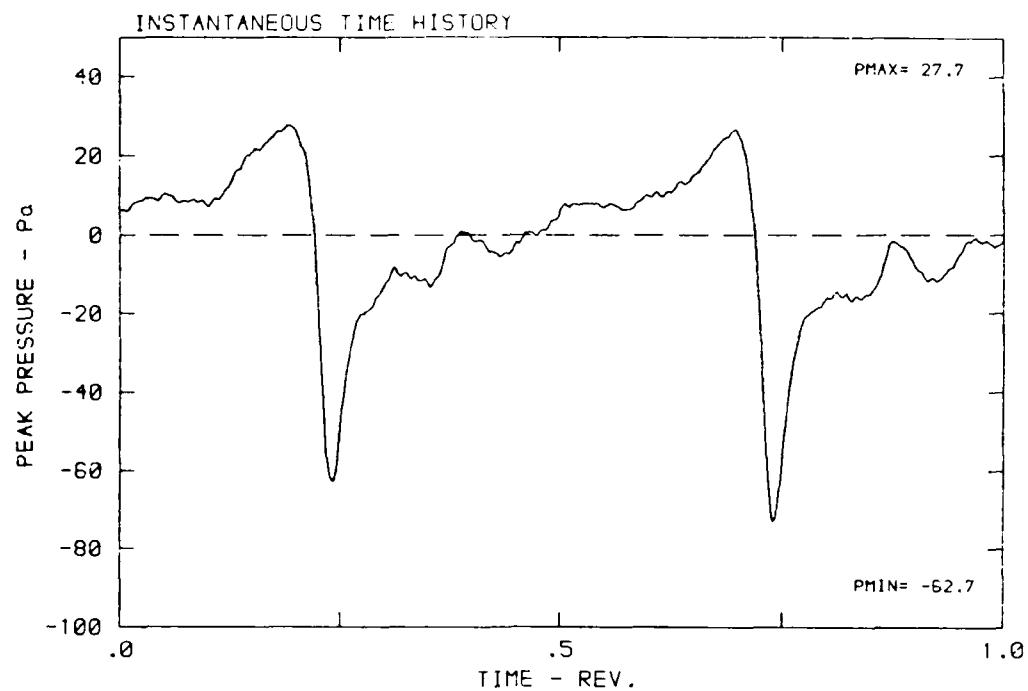
DATA POINT: FC-2 RUN: 128 MP: 2

β : 20.7° MH: .7665 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



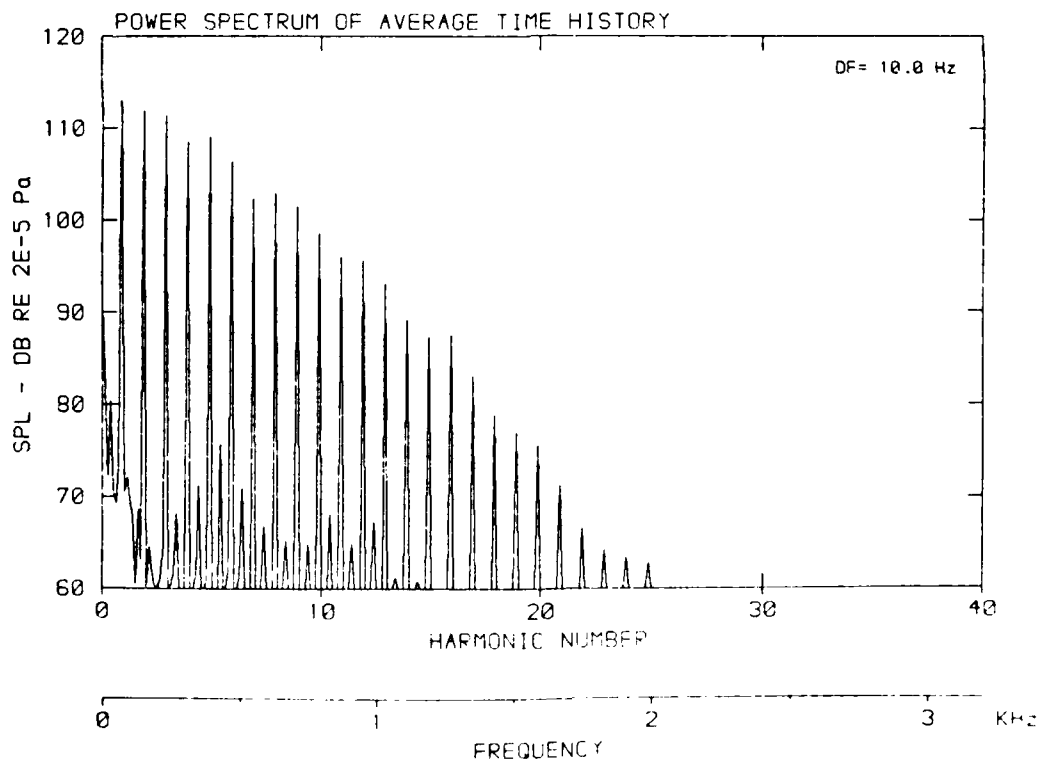
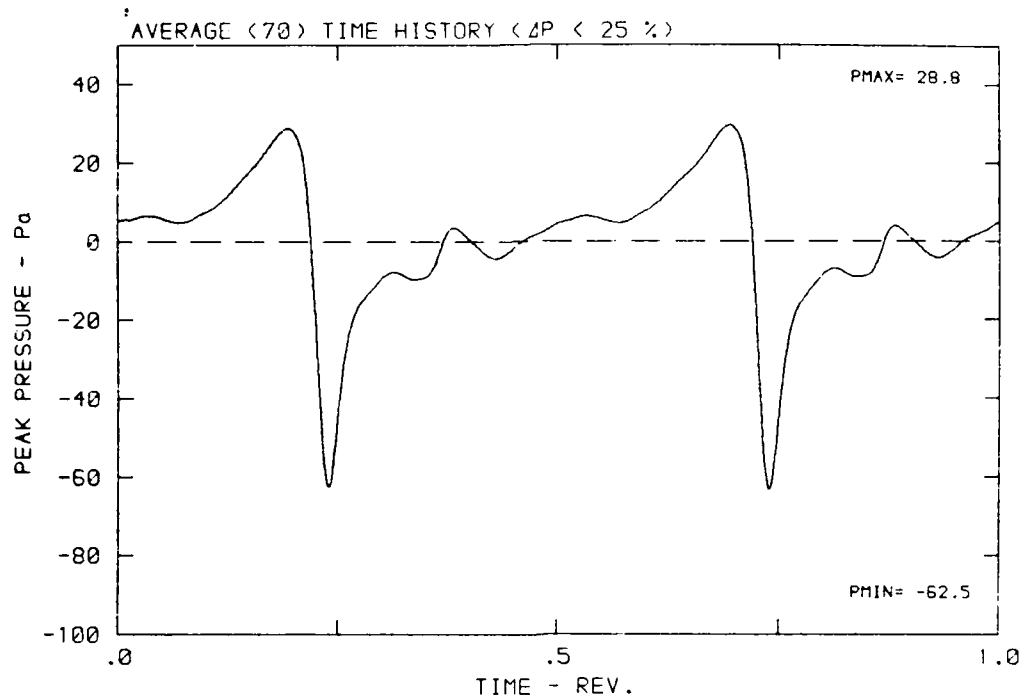
DATA POINT: FC-2 RUN: 128 MP: 3

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



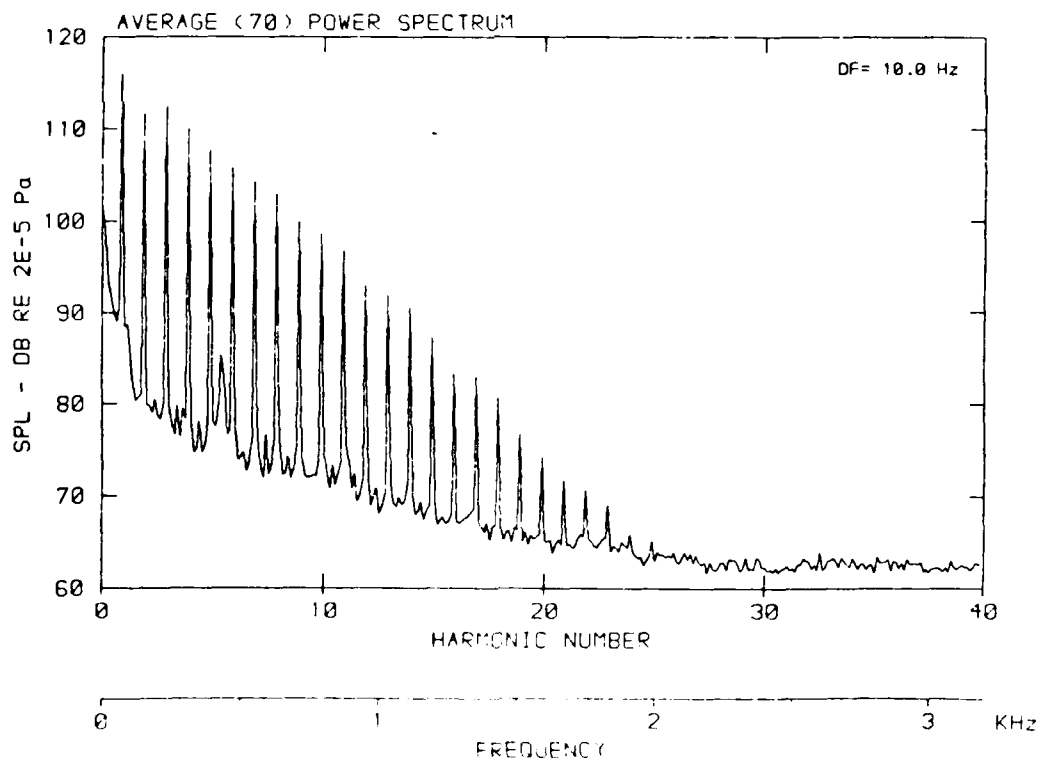
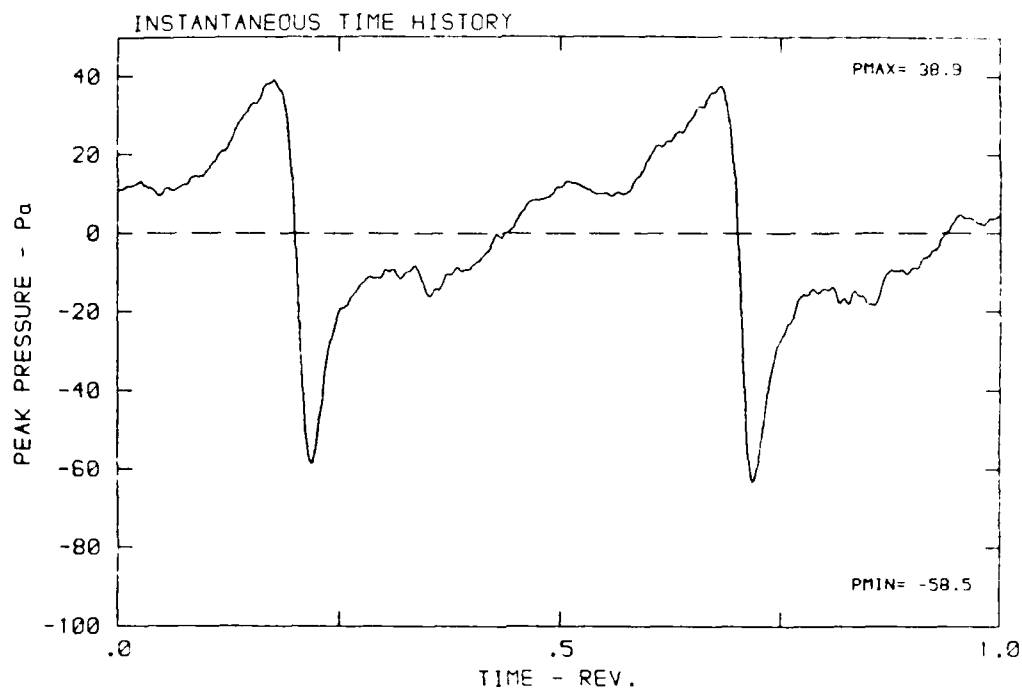
DATA POINT: FC-2 RUN: 128 MP: 3

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



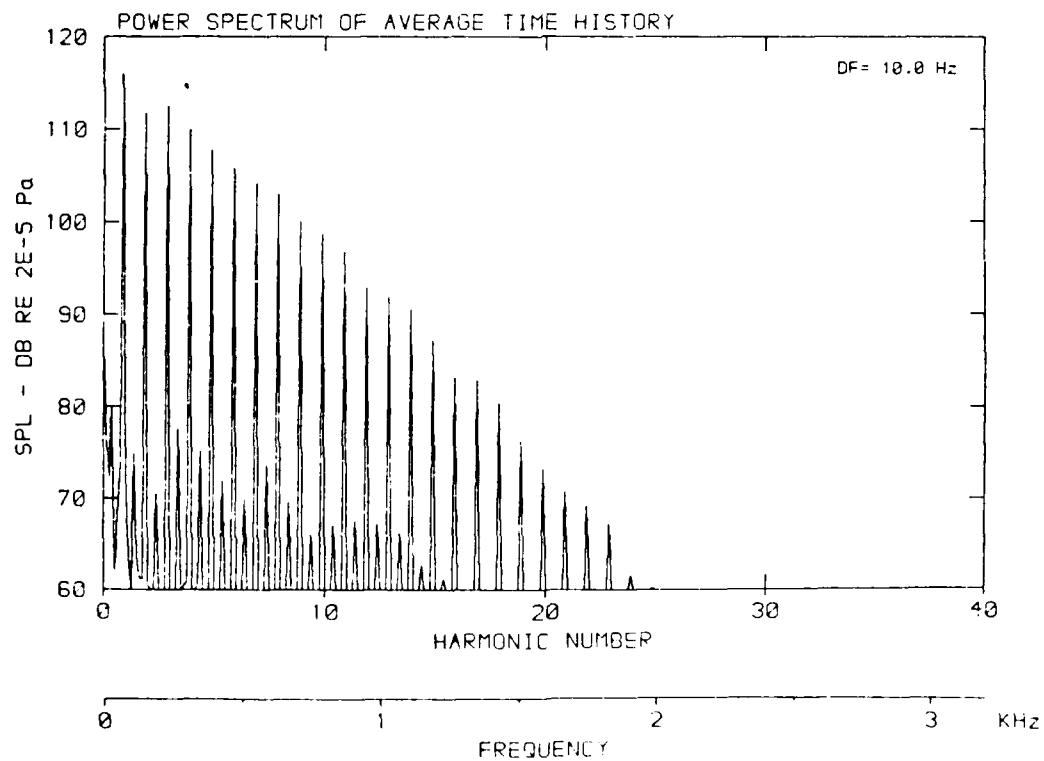
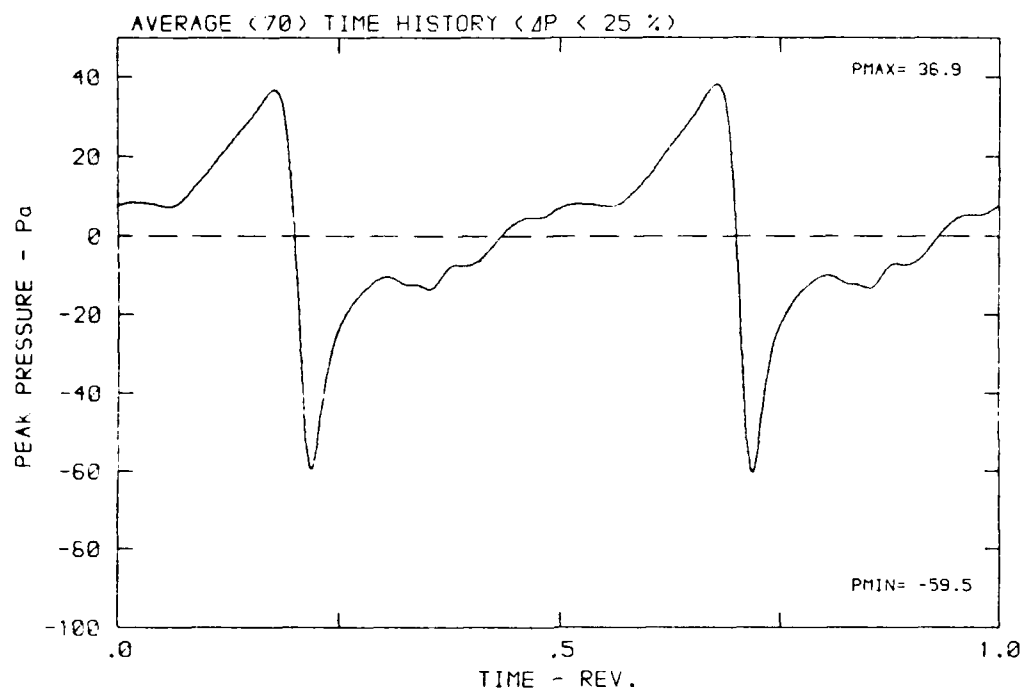
DATA POINT: FC-2 RUN: 128 MP: 4

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 °K



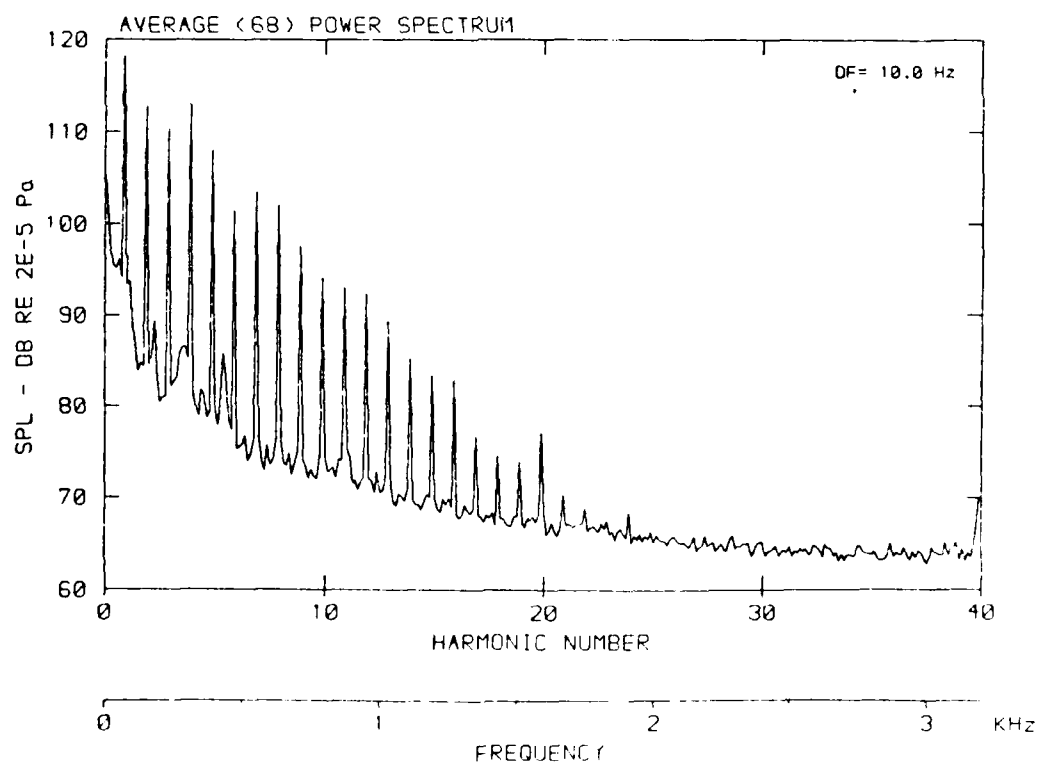
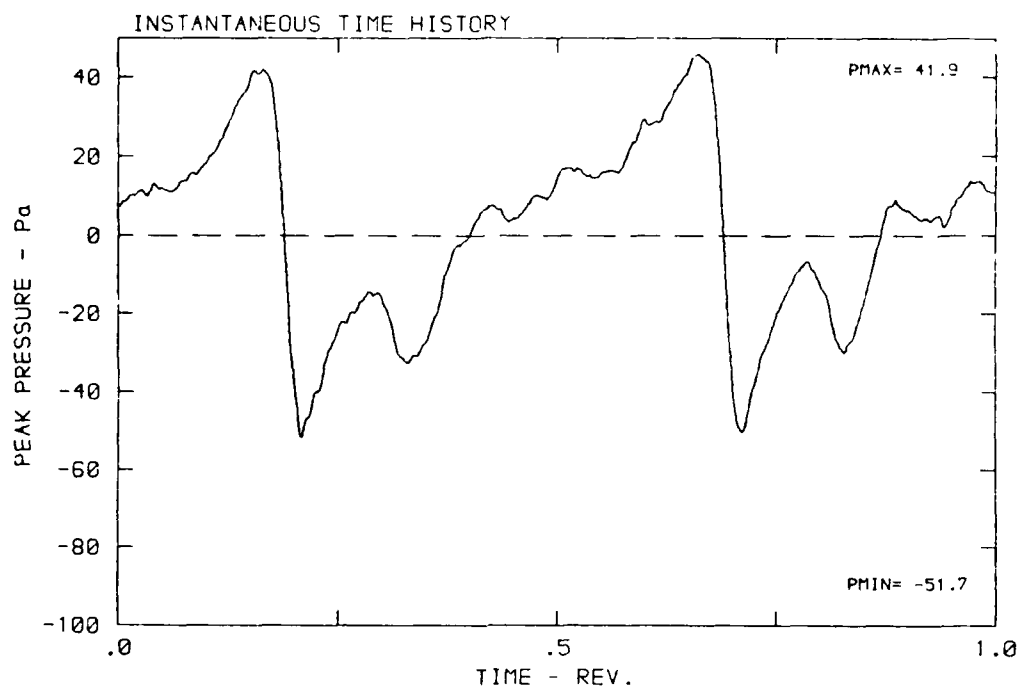
DATA POINT: FC-2 RUN: 128 MP: 4

β : 20.7° MH: .7665 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



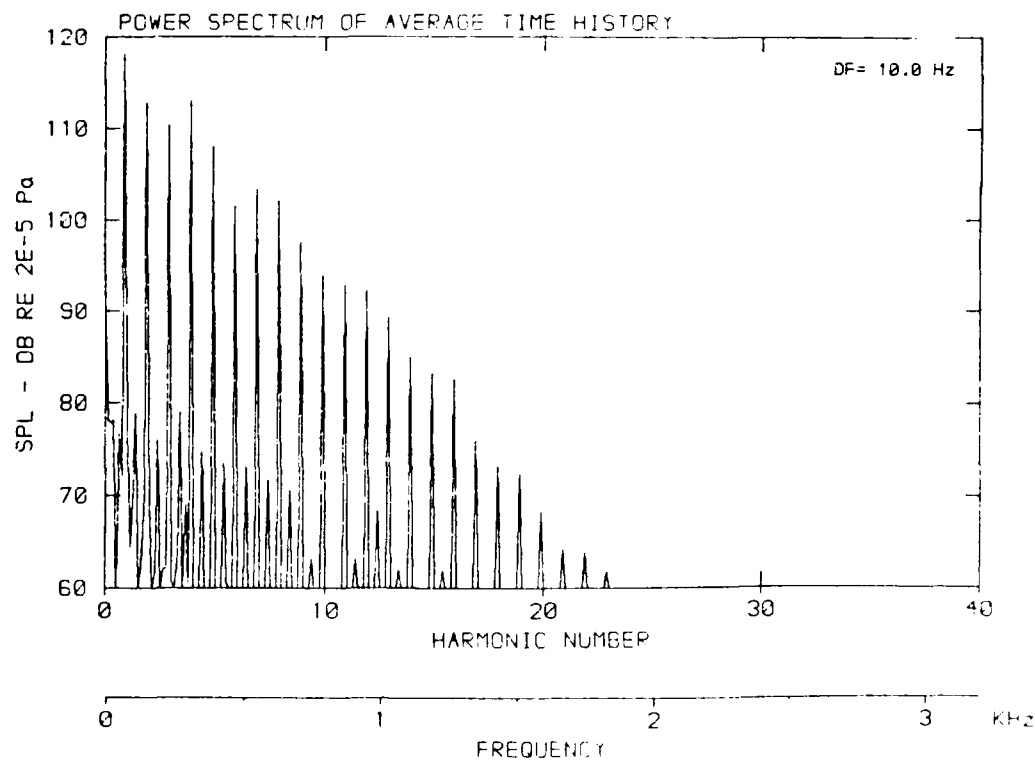
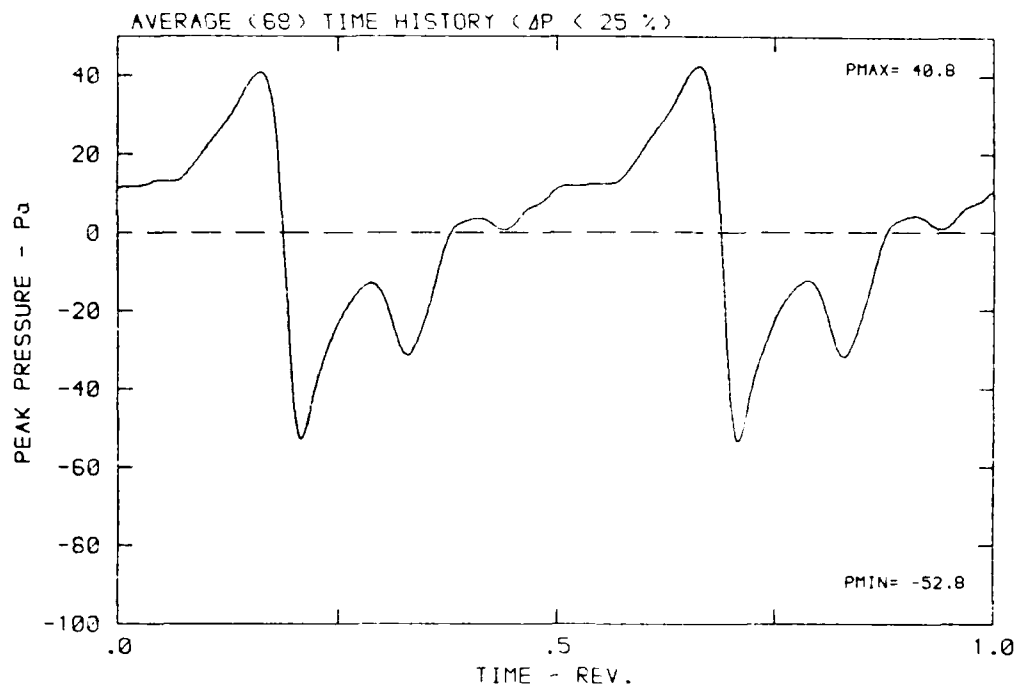
DATA POINT: FC-2 RUN: 128 MP: 5

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3 K



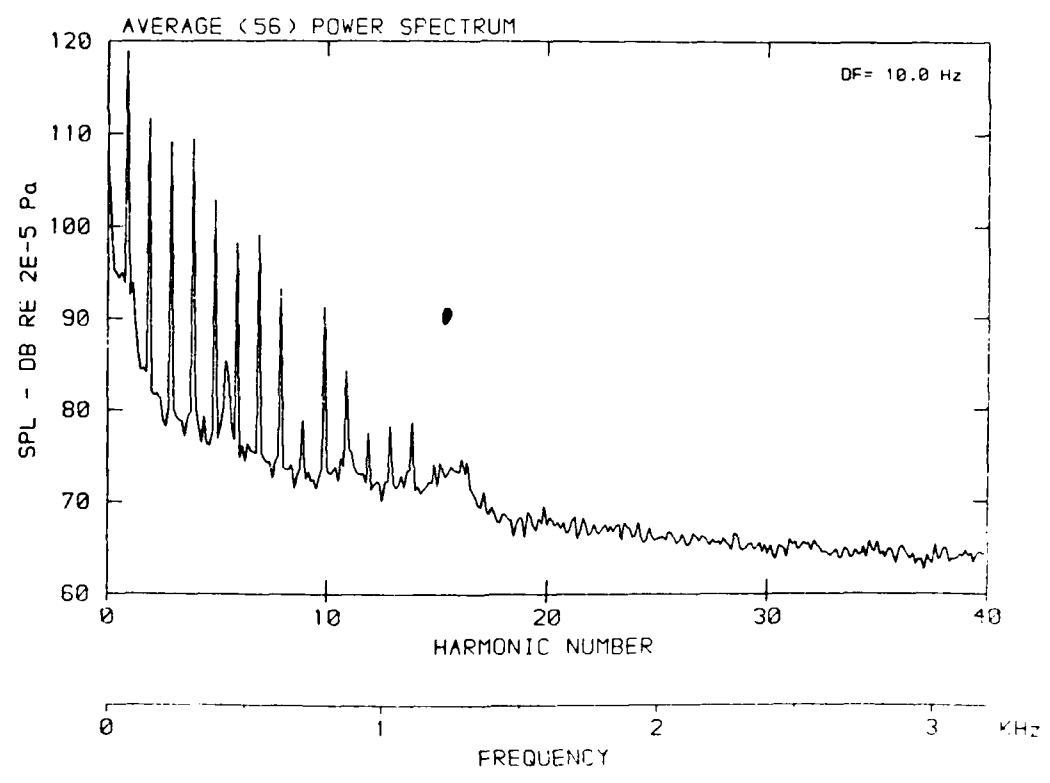
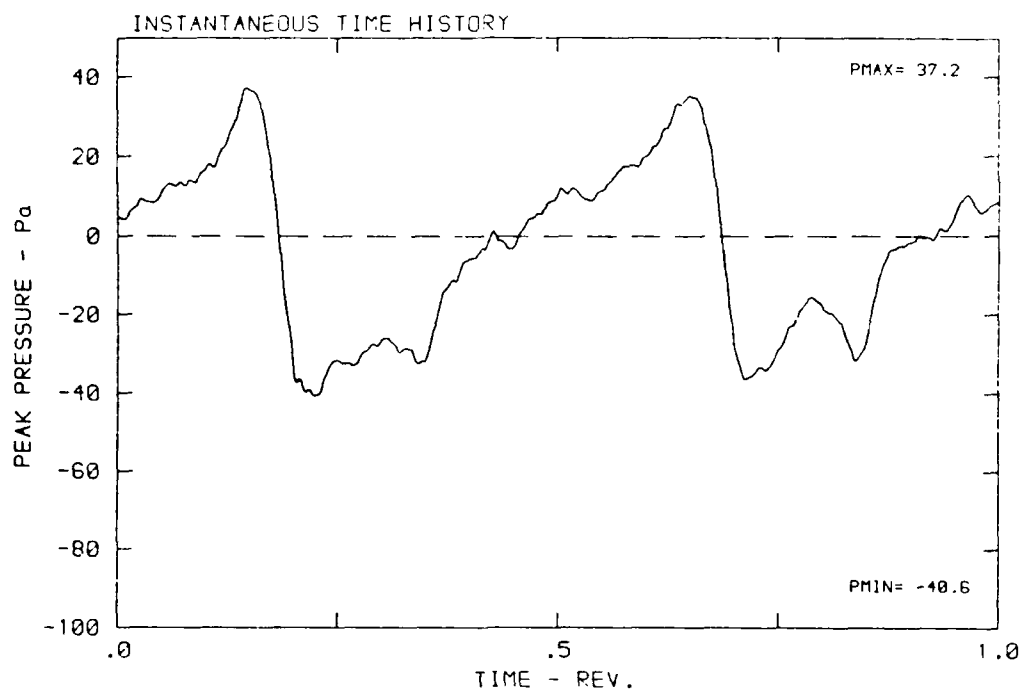
DATA POINT: FC-2 RUN: 128 MP: 5

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



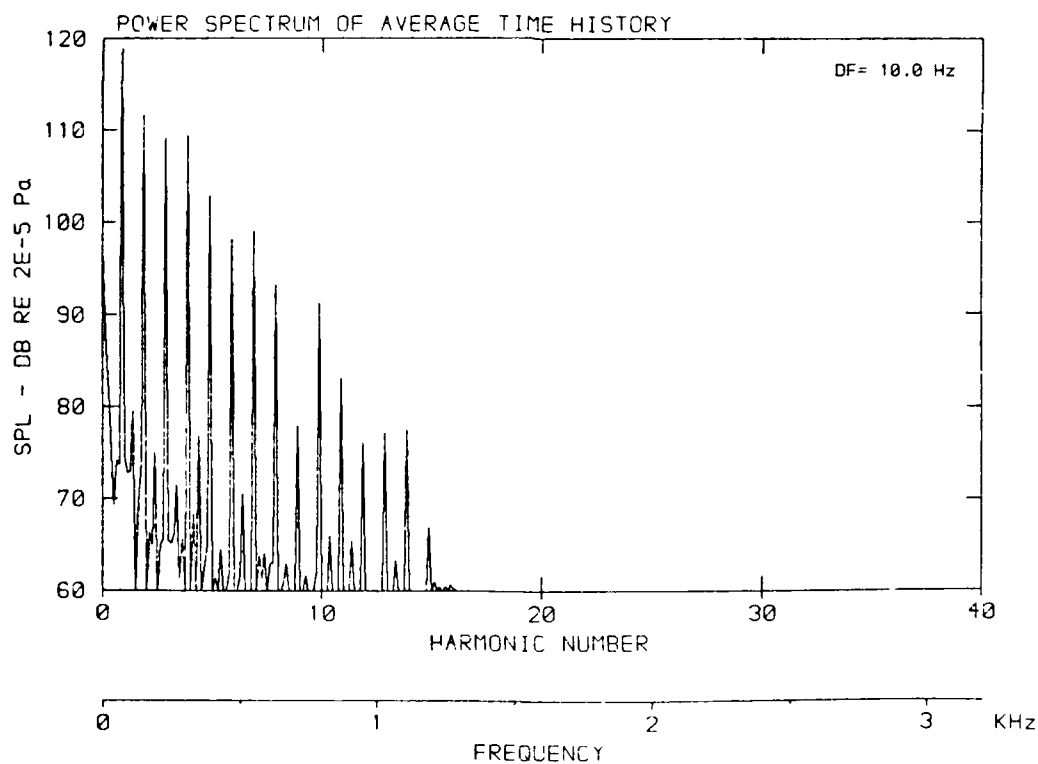
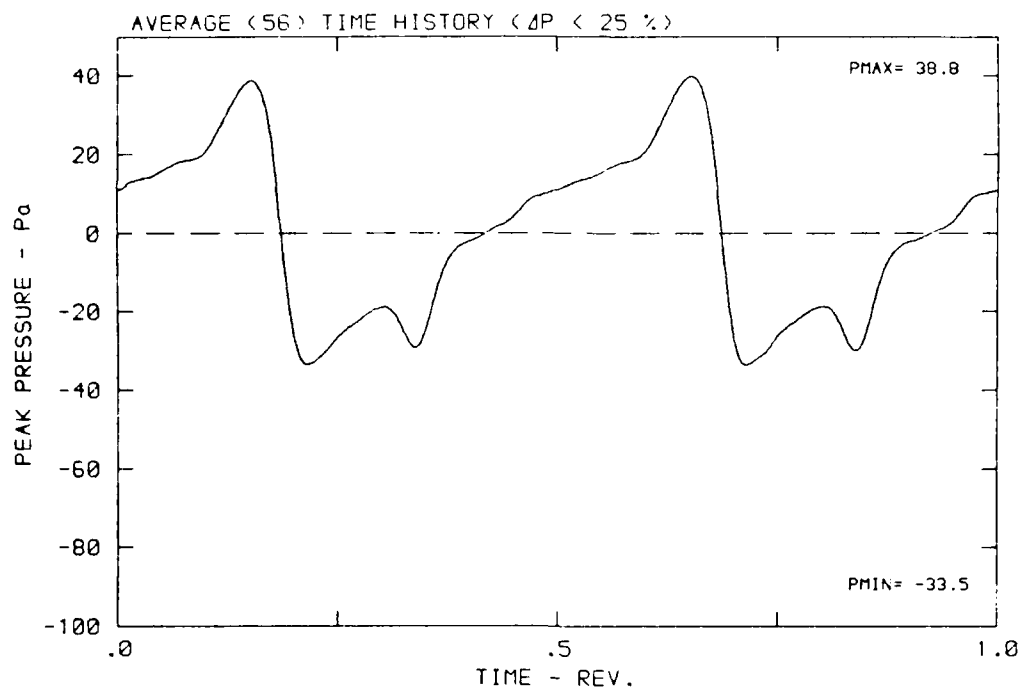
DATA POINT: FC-2 RUN: 128 MP: 8

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3



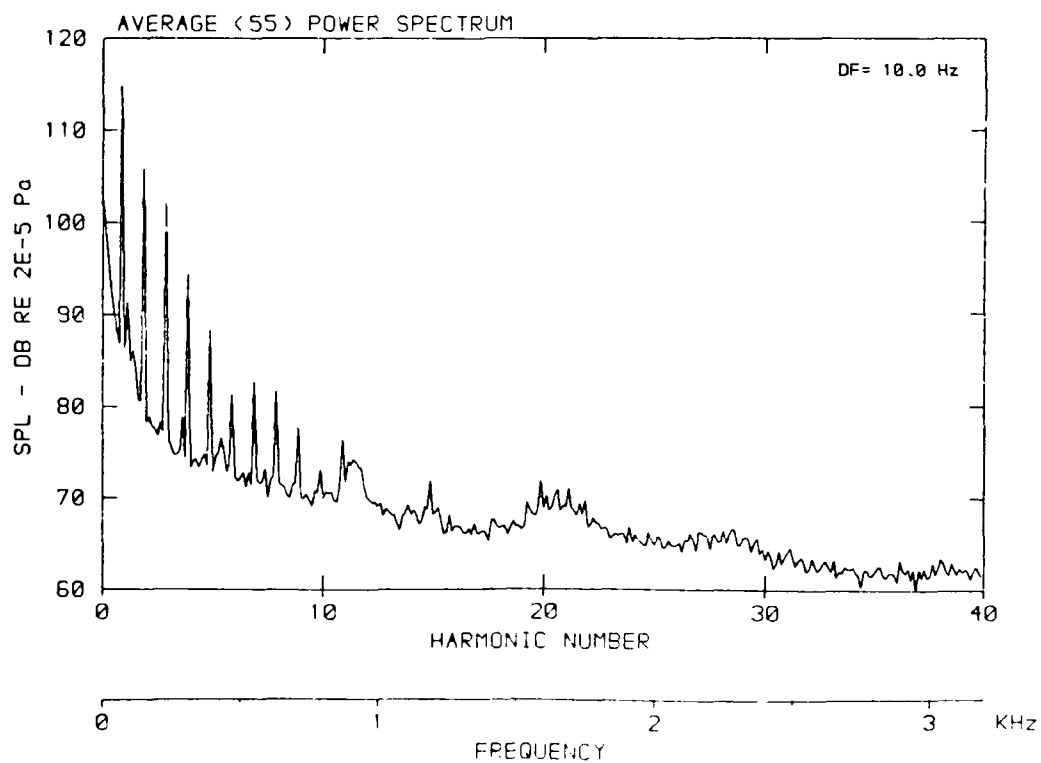
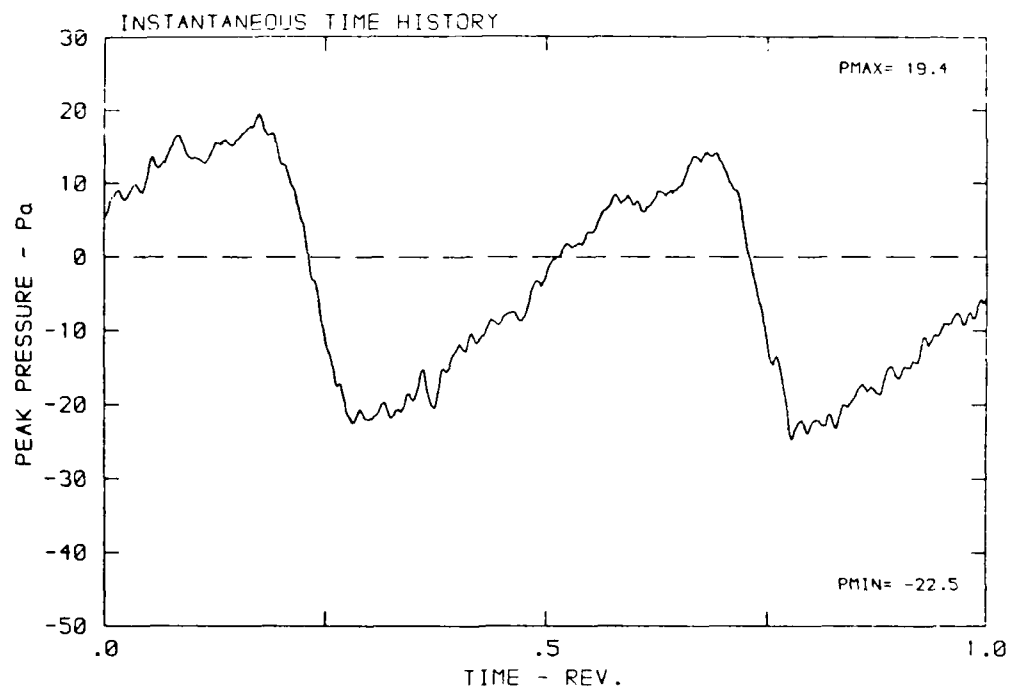
DATA POINT: FC-2 RUN: 128 MP: 6

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3 K



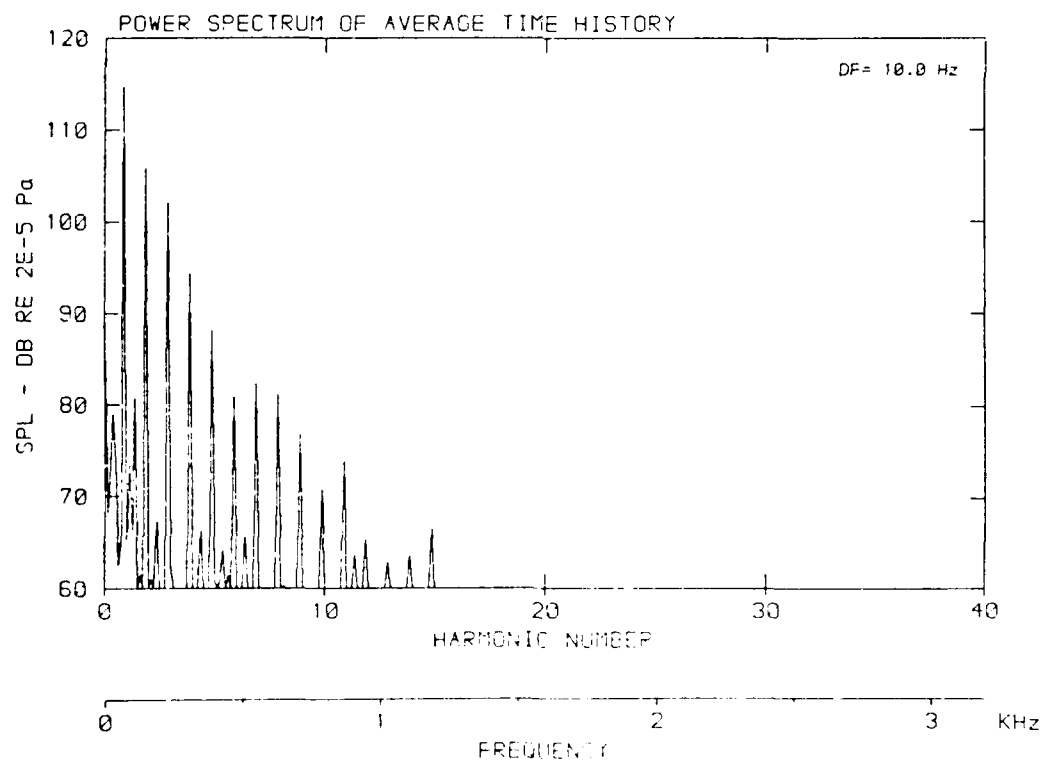
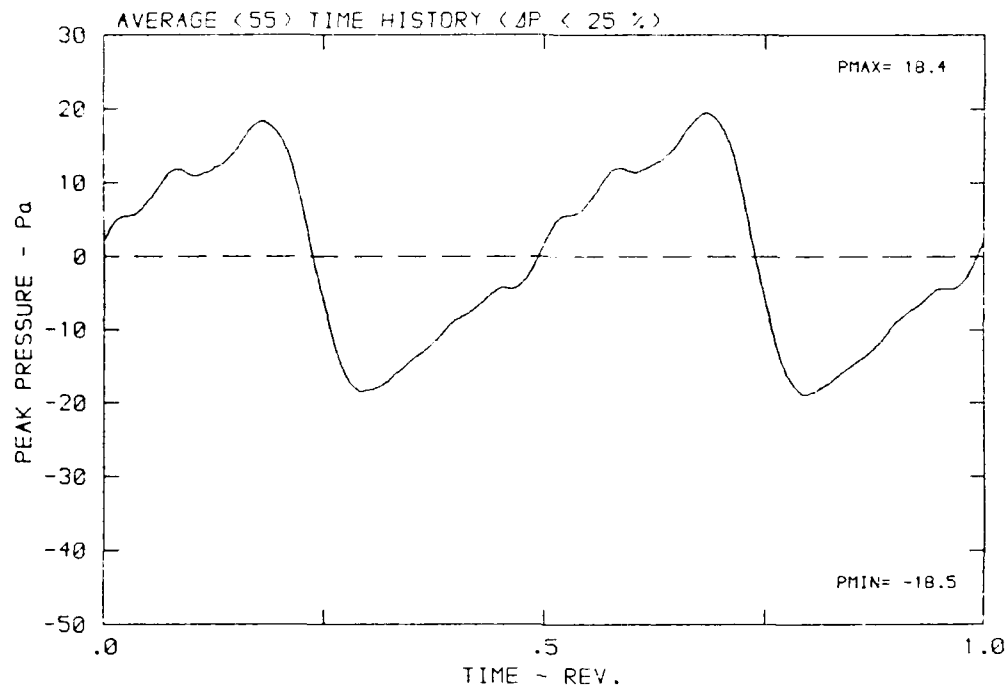
DATA POINT: FC-2 RUN: 128 MP: 7

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3



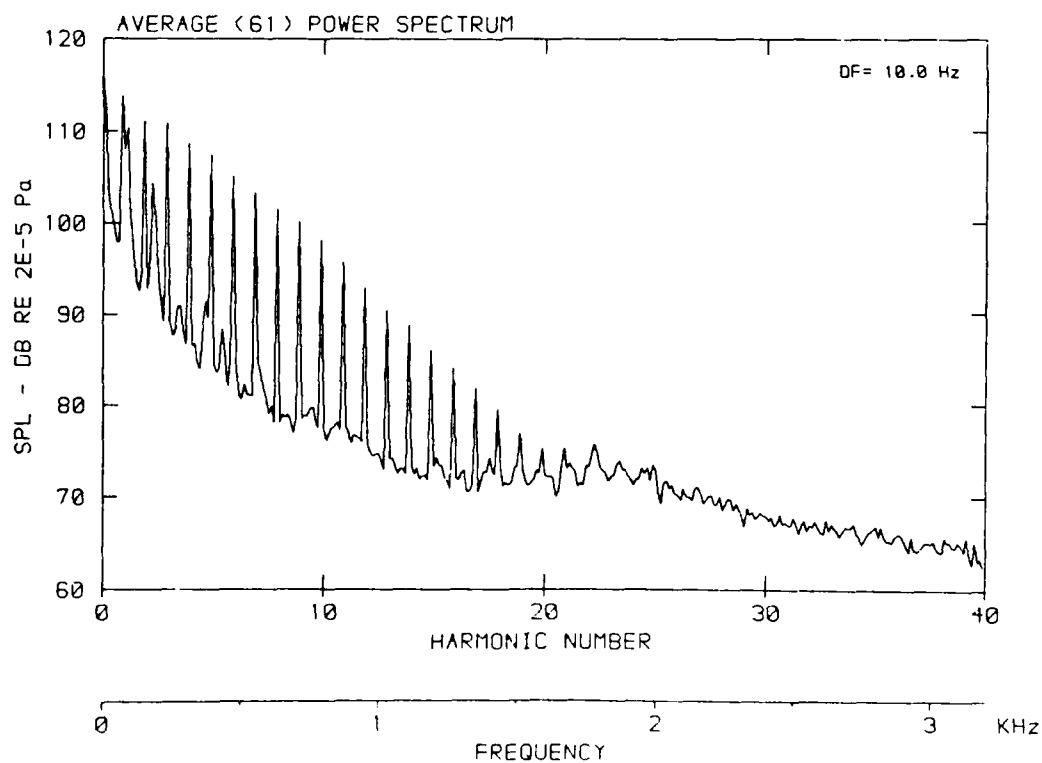
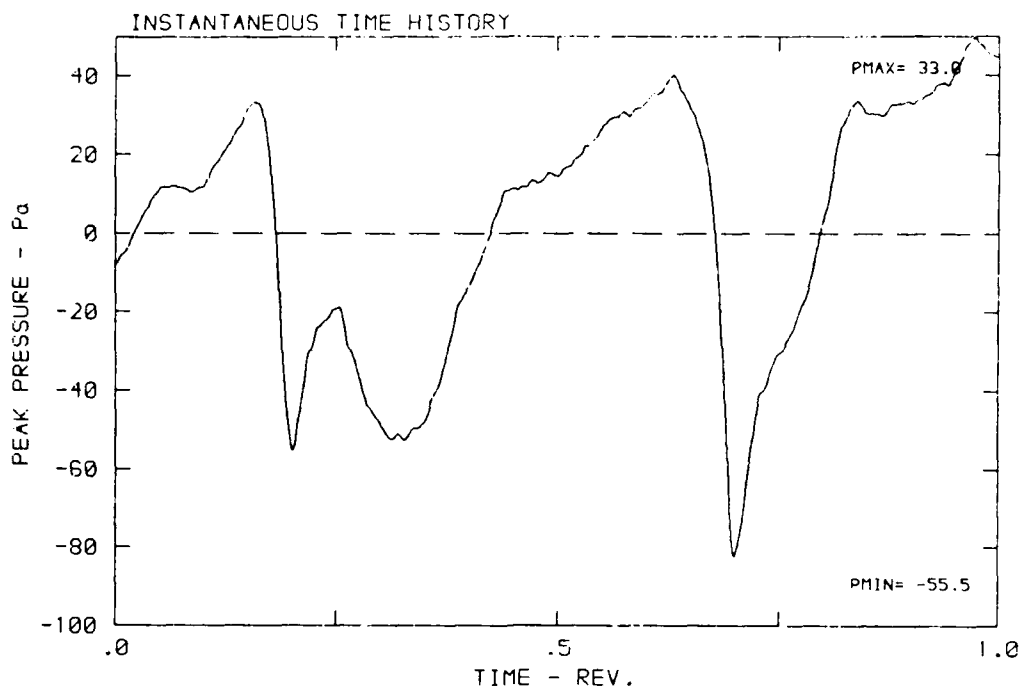
DATA POINT: FC-2 RUN: 128 MP: 7

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 297.3 K



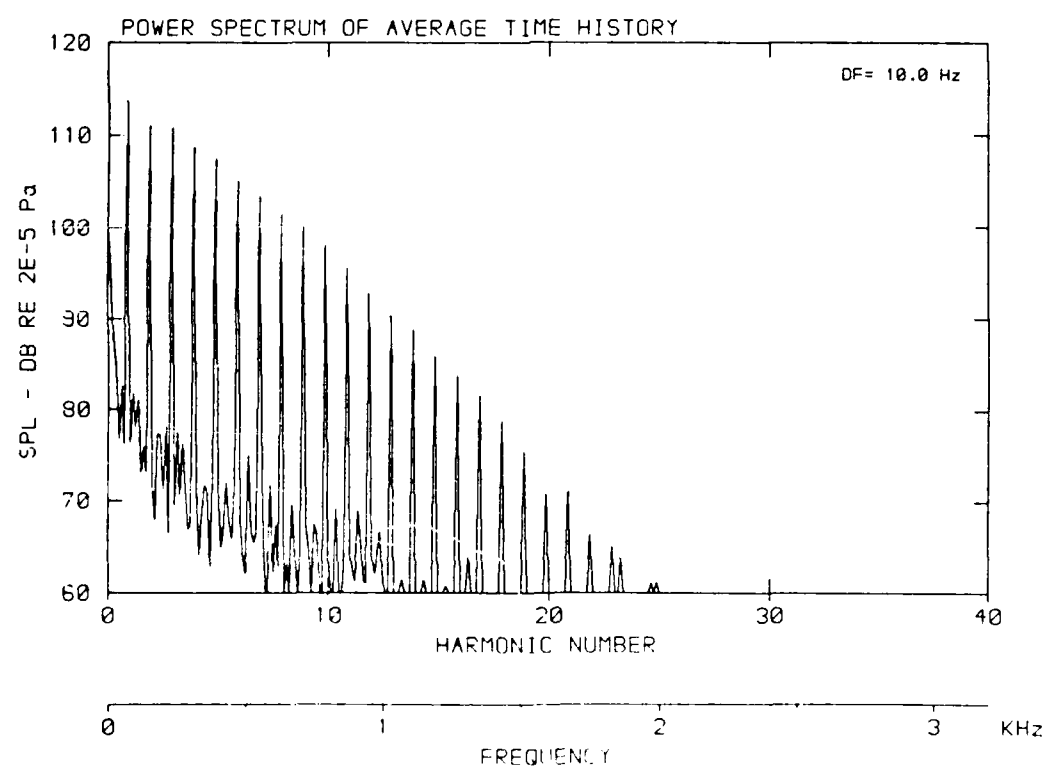
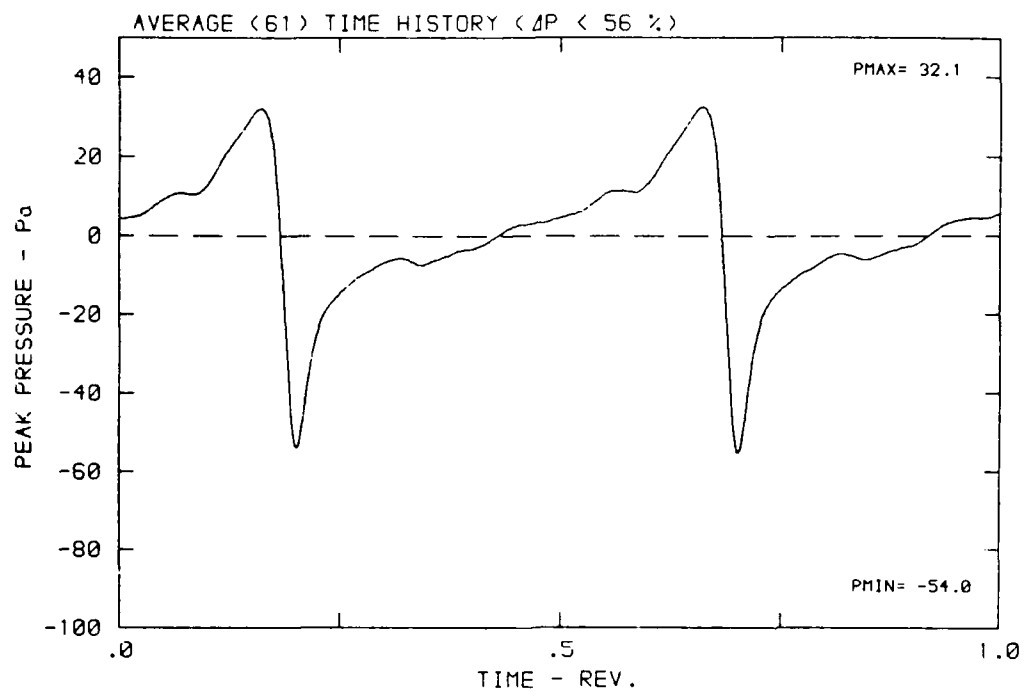
DATA POINT: FC-2 RUN: 128 MP: 8

β : 20.7° MH: .7666 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 287.3 K



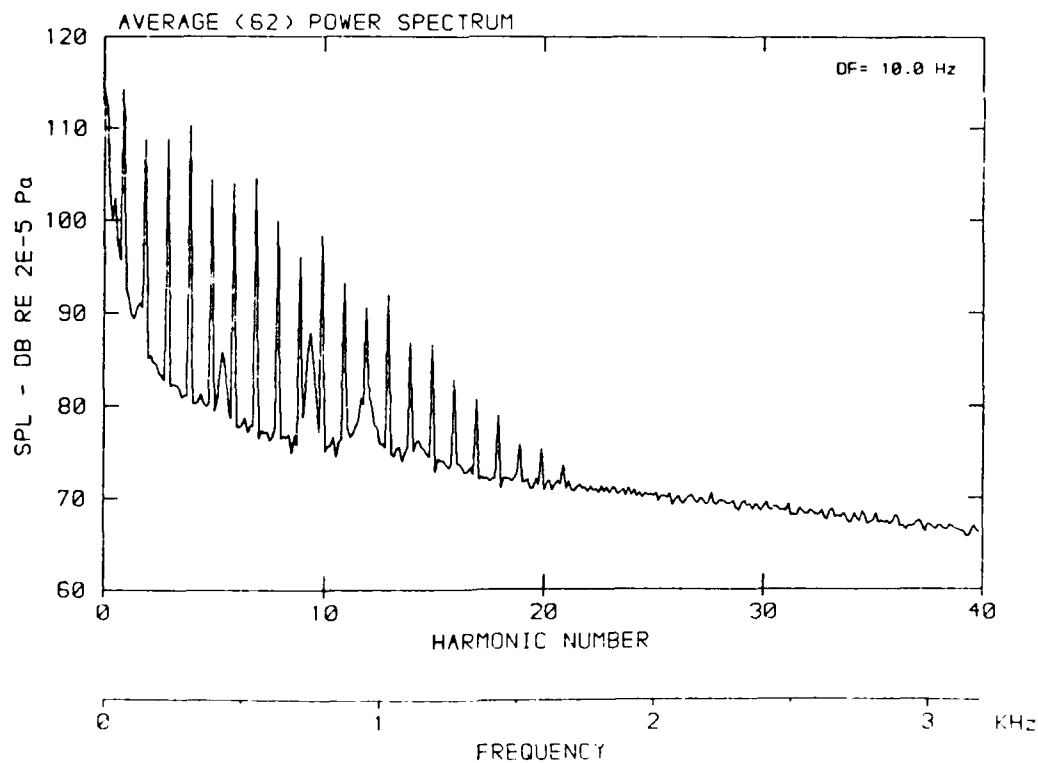
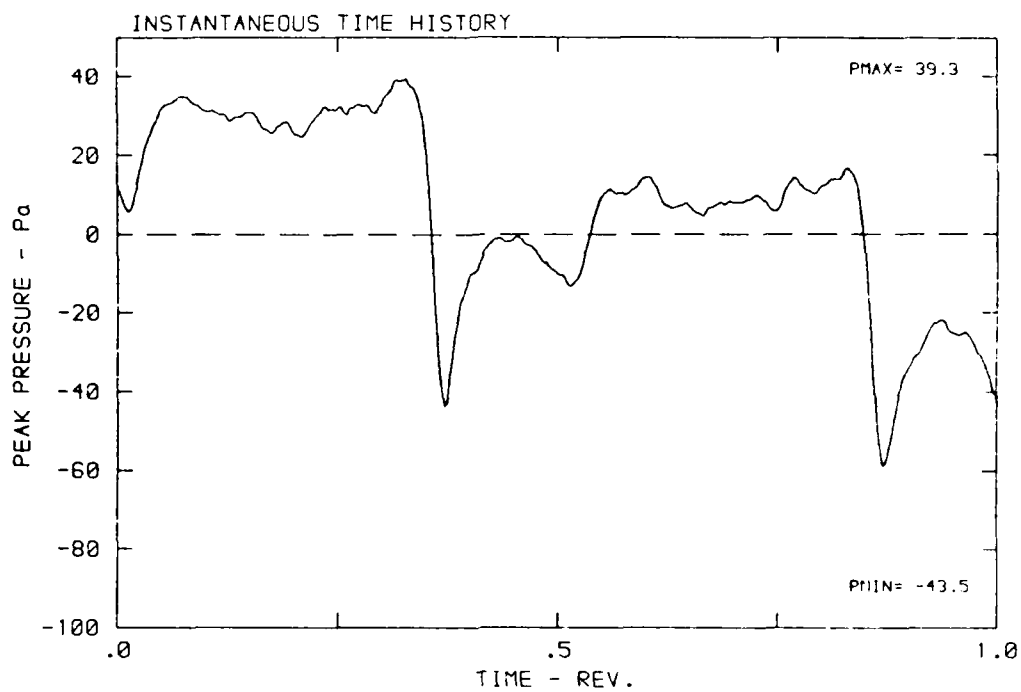
DATA POINT: FC-2 RUN: 128 MP: 8

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



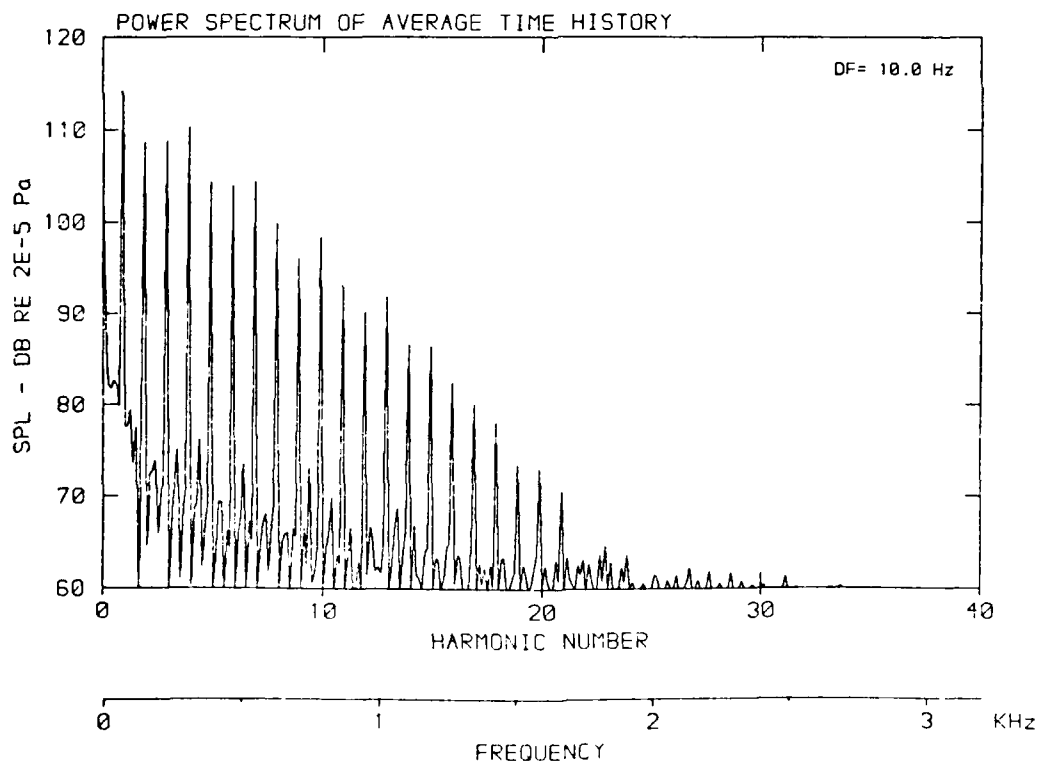
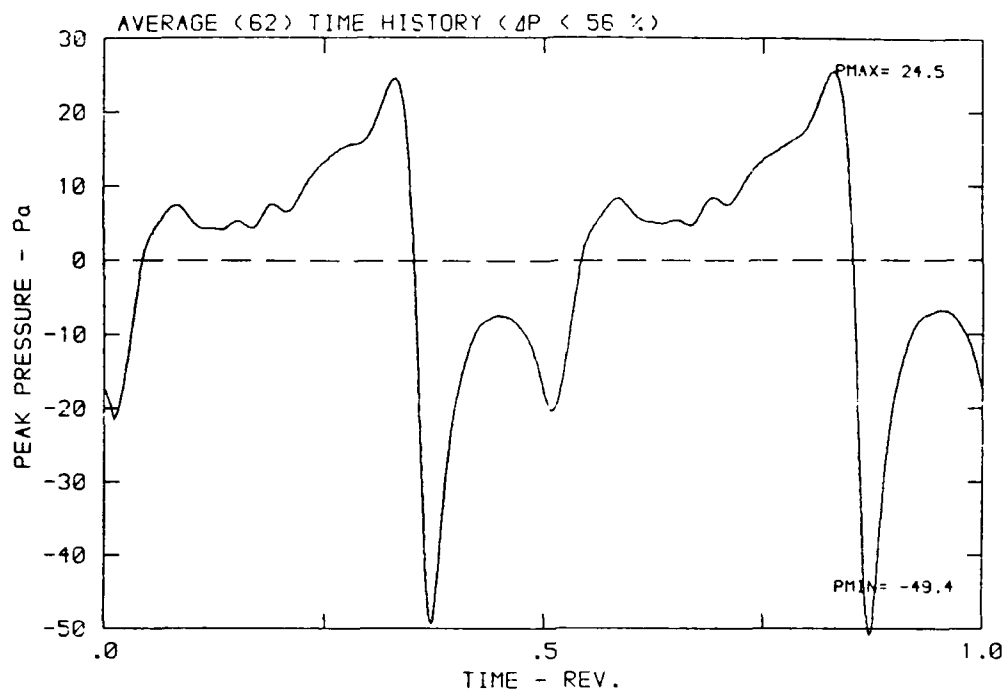
DATA POINT: FC-2 RUN: 128 MP: 9

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 267.3 K



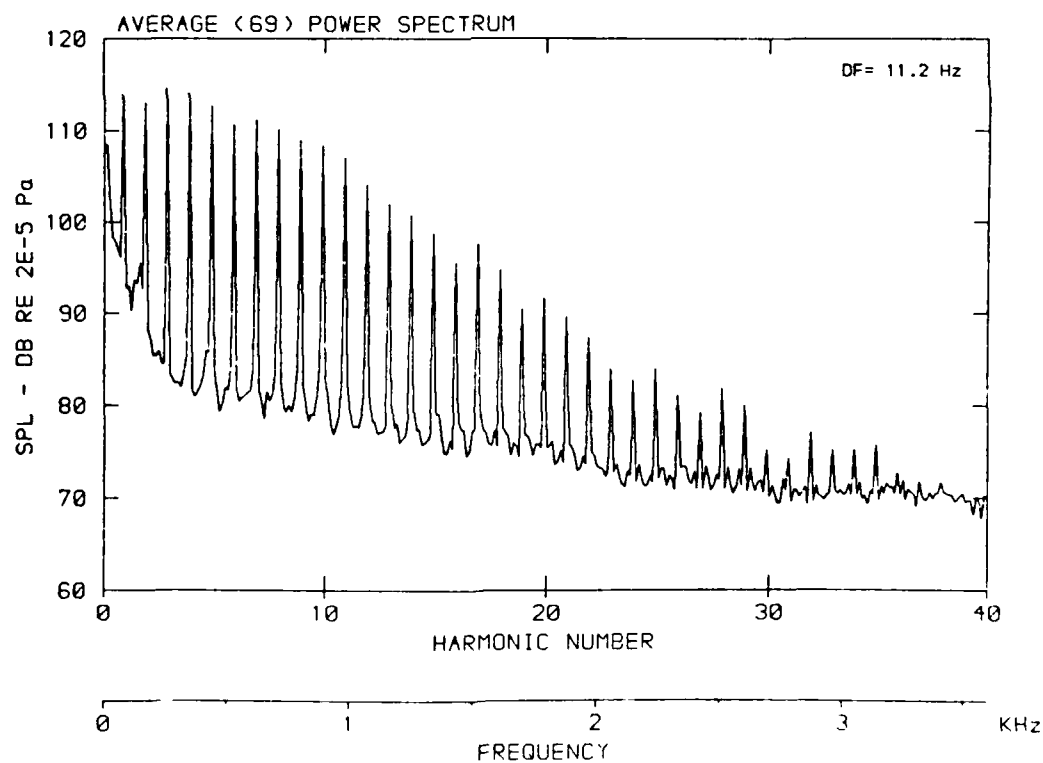
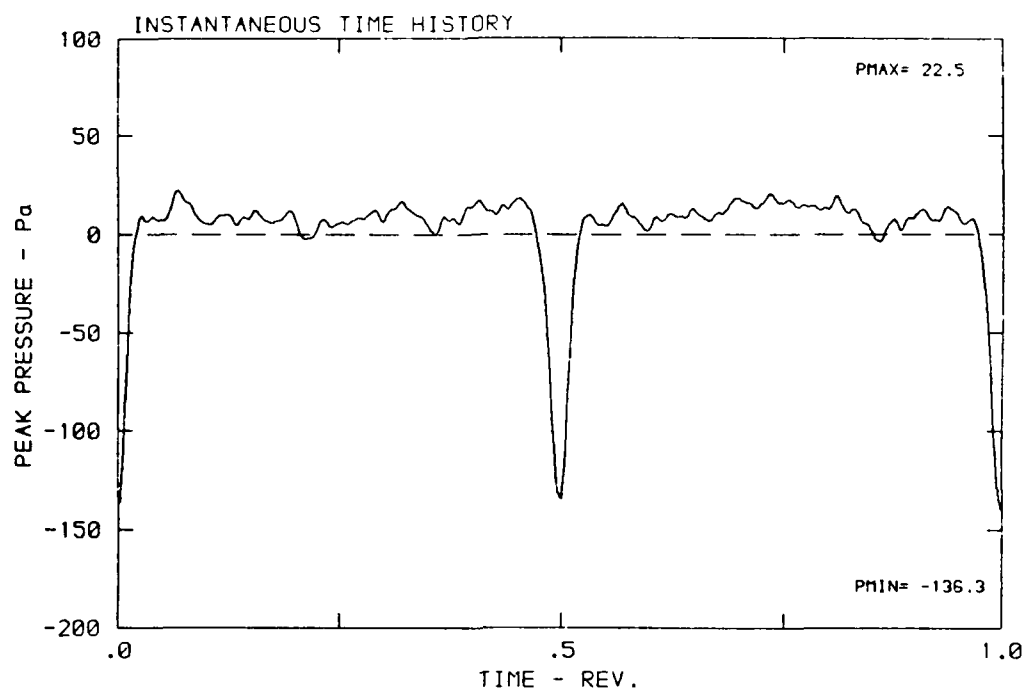
DATA POINT: FC-2 RUN: 128 MP: 9

β : 20.7° MH: .7666 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 287.3 K



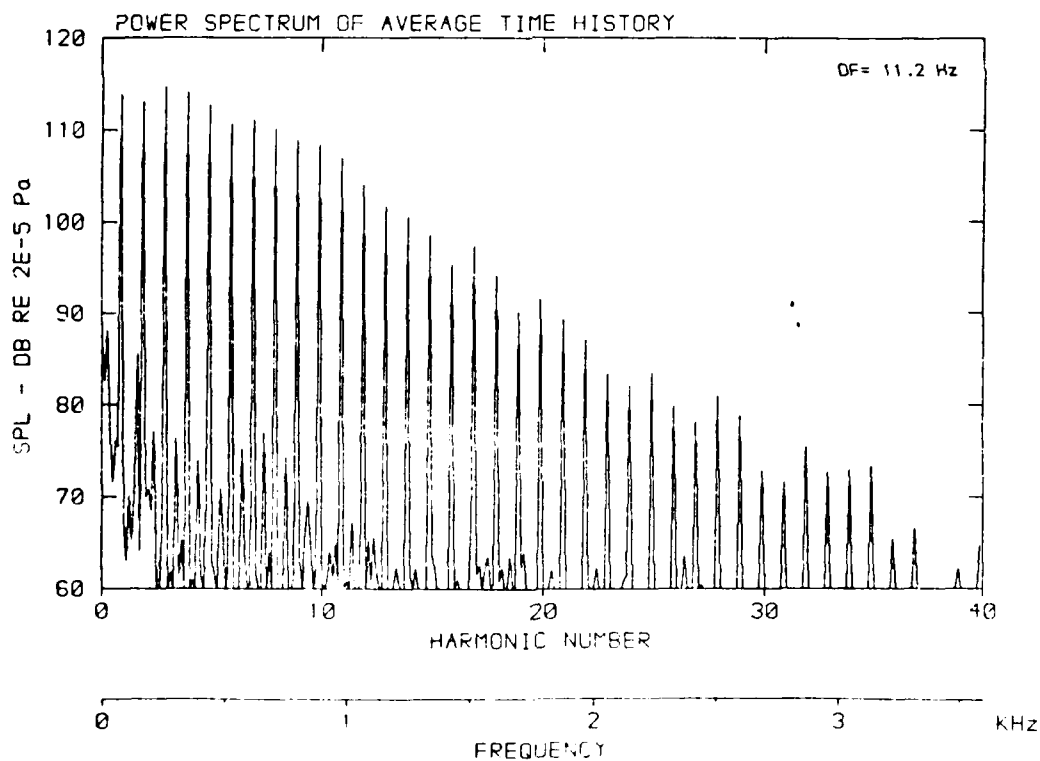
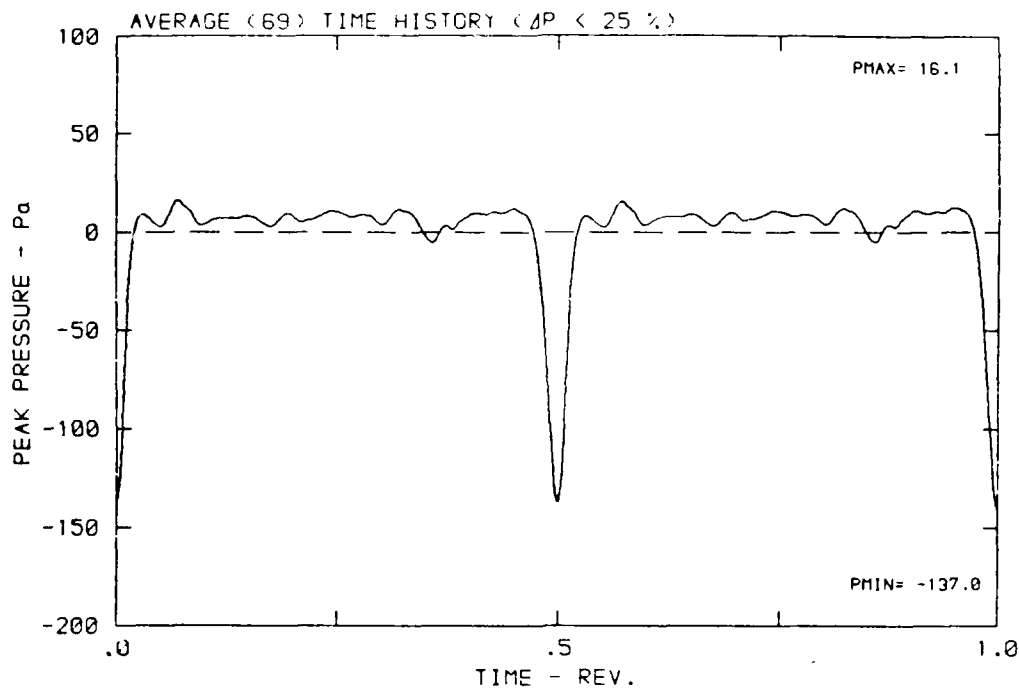
DATA POINT: FC-3 RUN: 129 MP: 1

β : 20.7° MH: .8732 n: 2700 rpm v/u : .268 ϕ : 3.6° T: 283.6 K



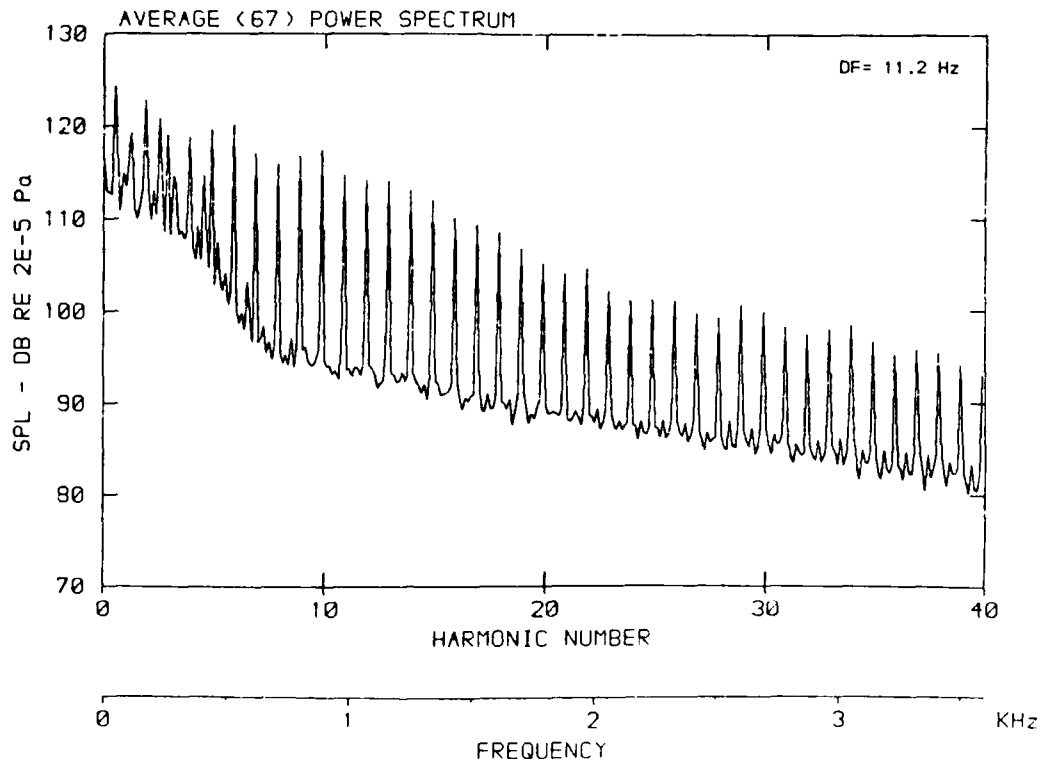
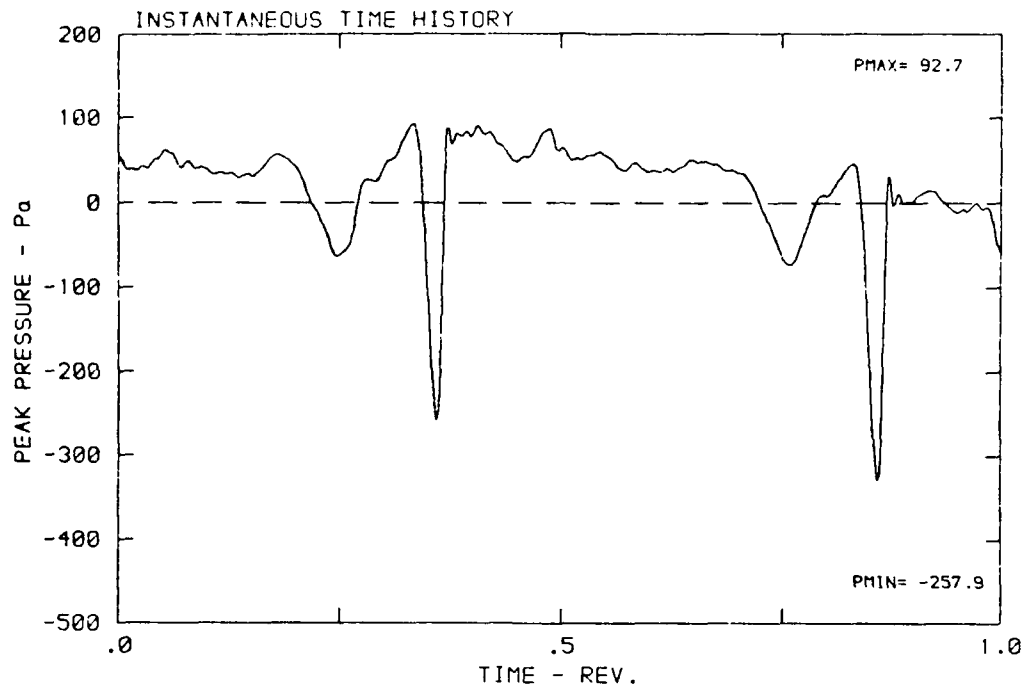
DATA POINT: FC-3 RUN: 129 MP: 1

β : 20.7° MH: .8732 n: 2700 rpm v/u : .268 ϕ : 3.6° T: 288.6 K



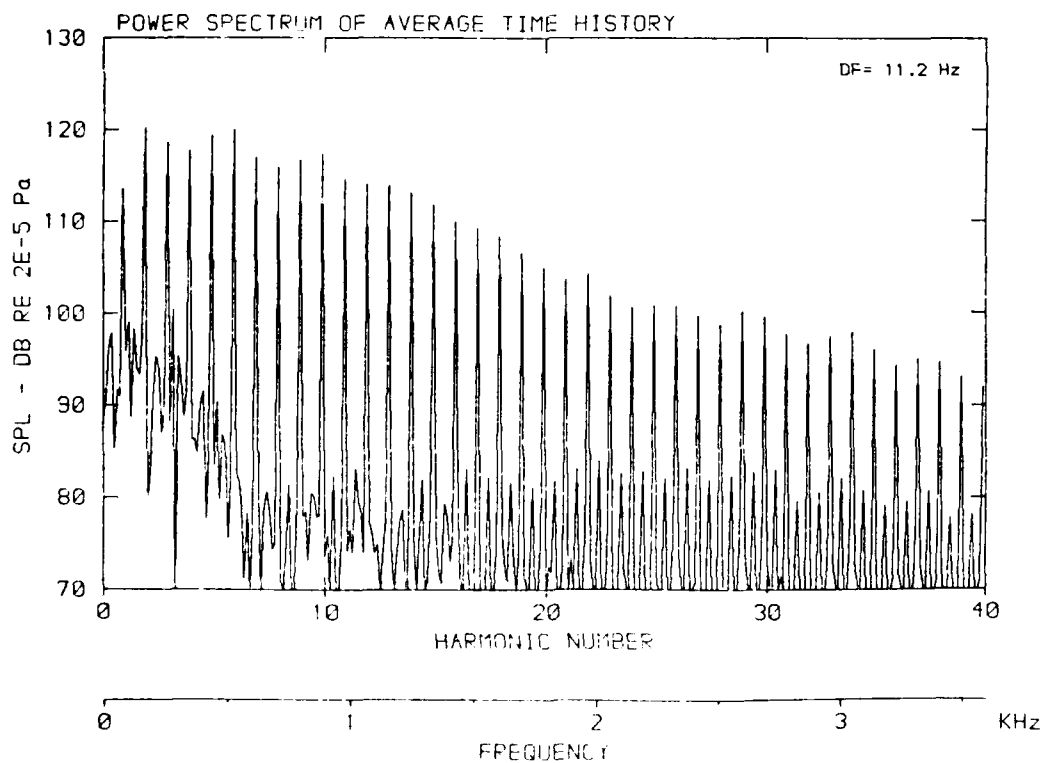
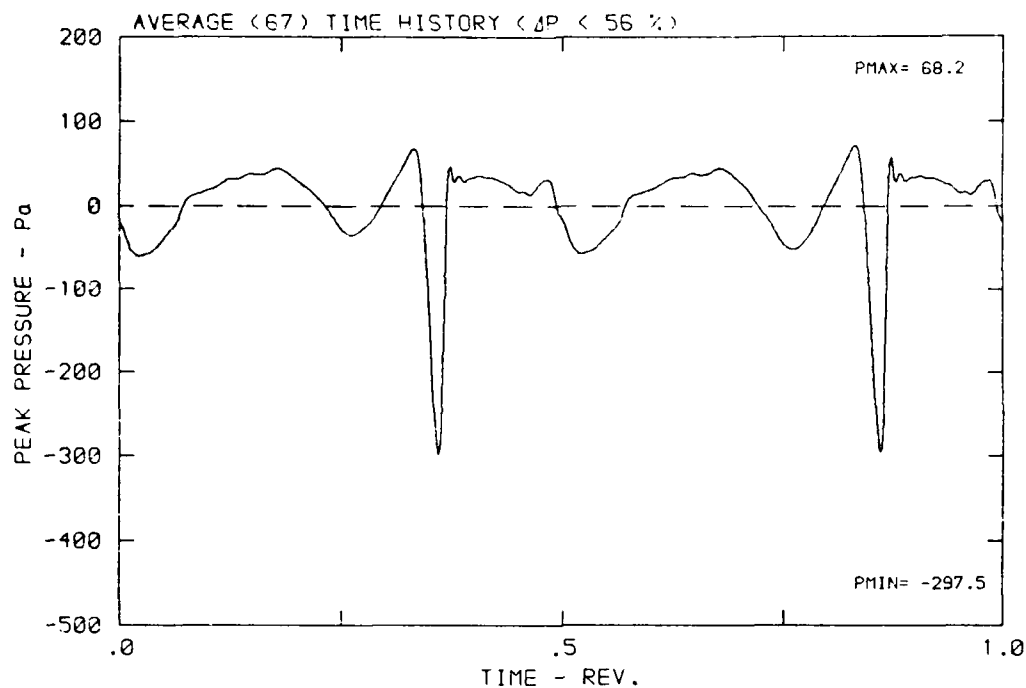
DATA POINT: FC-3 RUN: 129 MP: 2

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



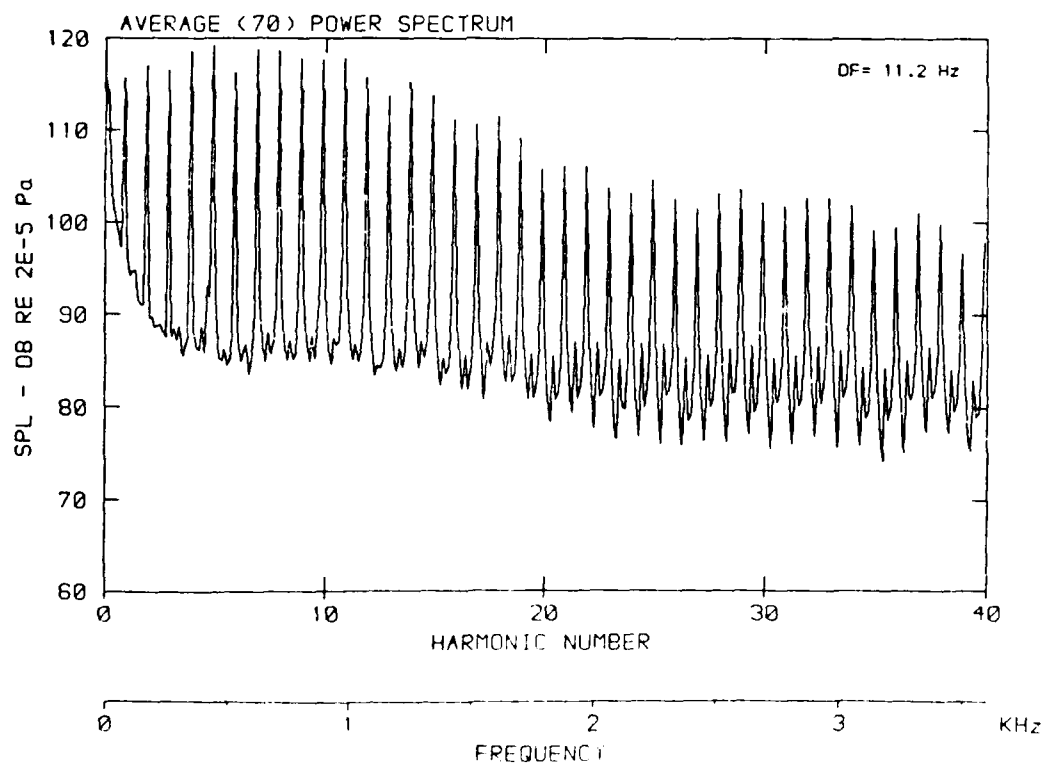
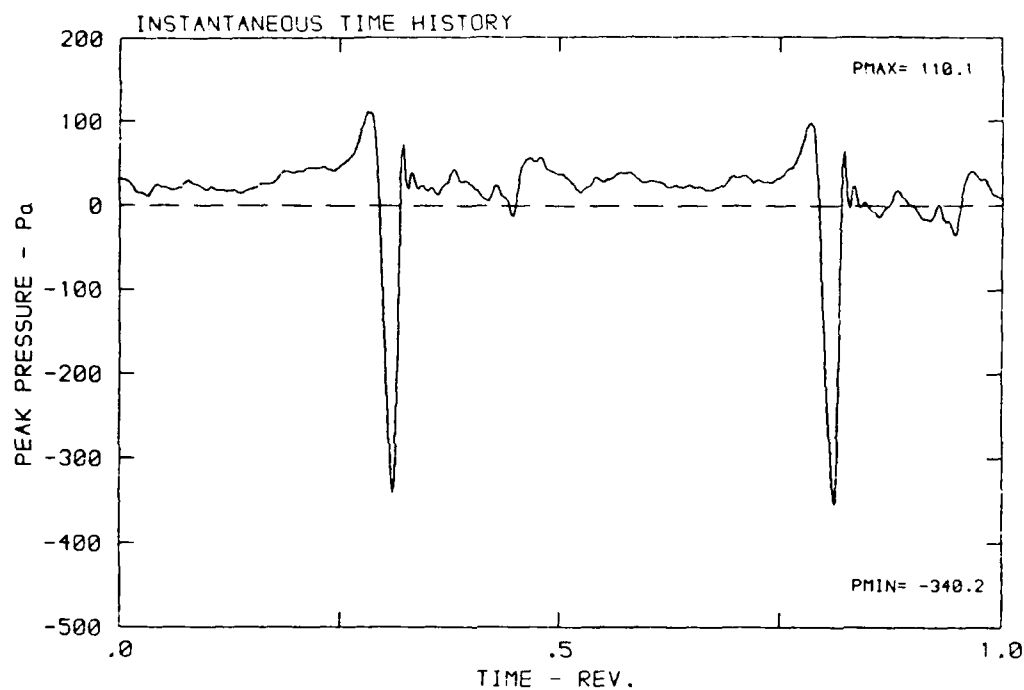
DATA POINT: FC-3 RUN: 129 MP: 2

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



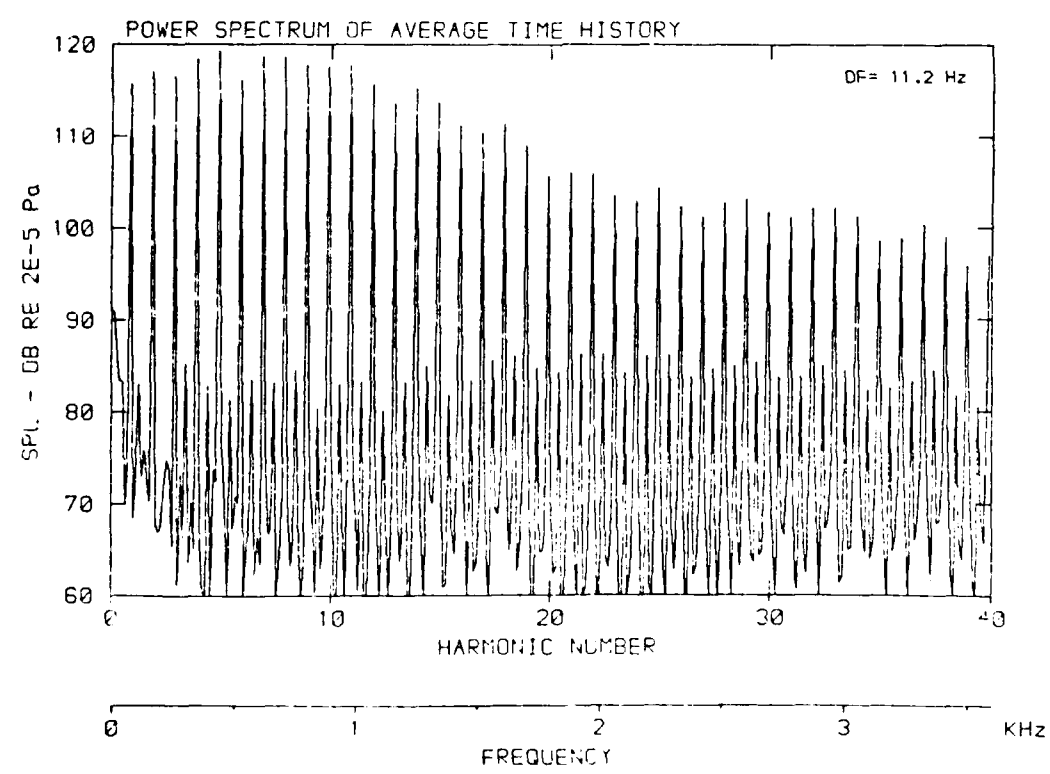
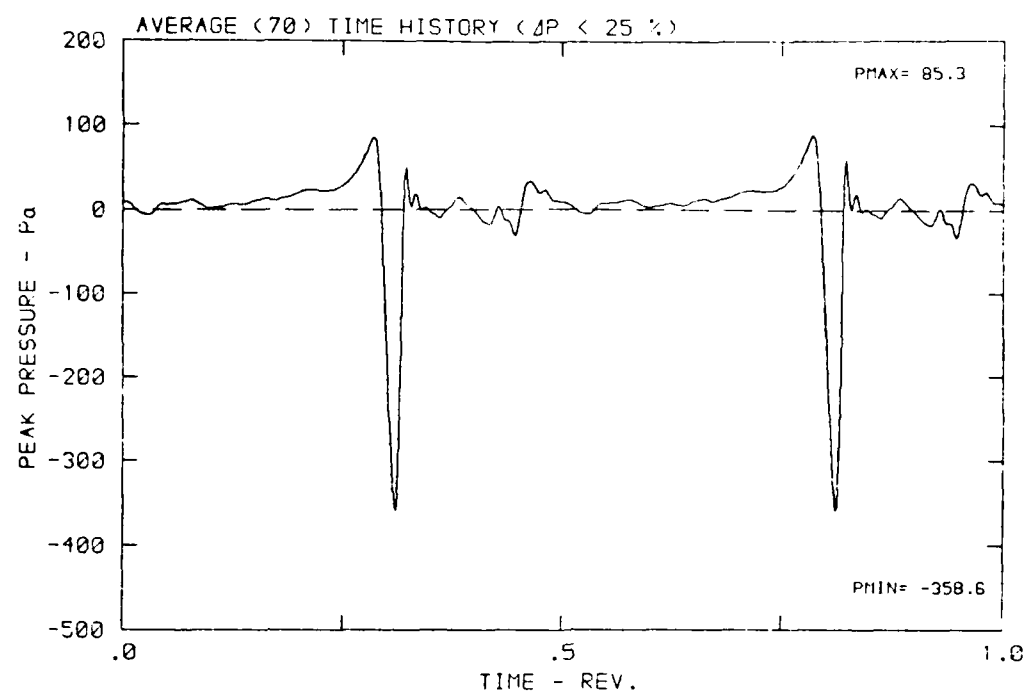
DATA POINT: FC-3 RUN: 129 MP: 3

β : 20.7° MH: .8732 n: 2700 rpm v/u : .268 ϕ : 3.6° T: 288.6 K



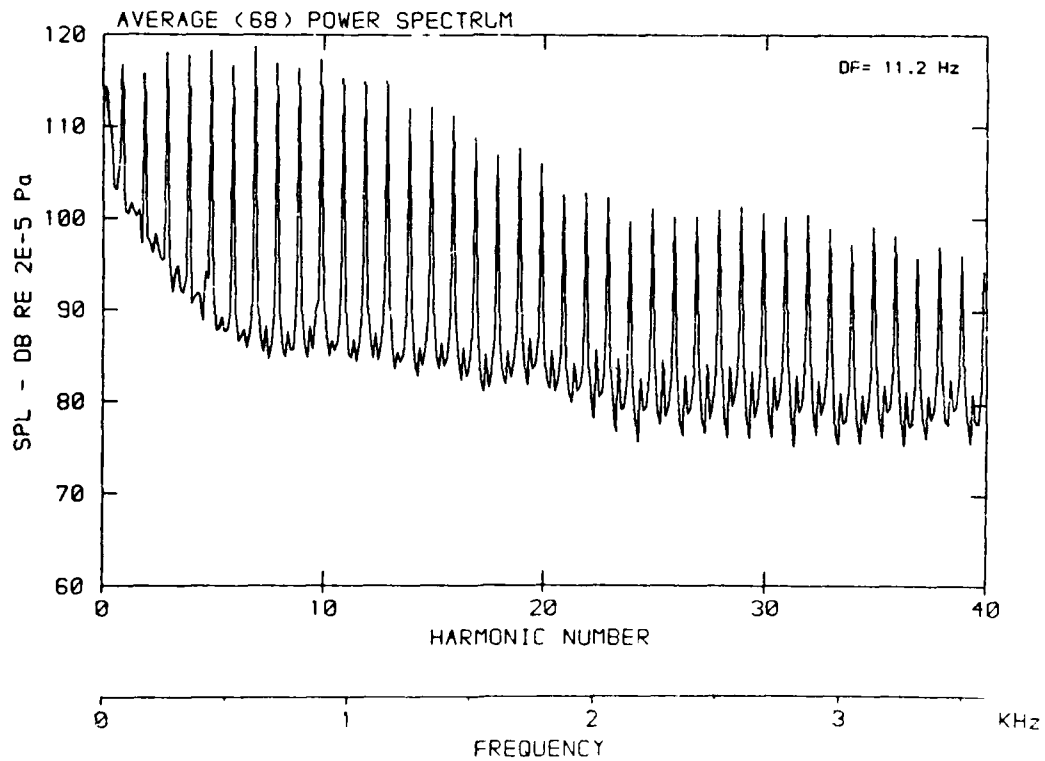
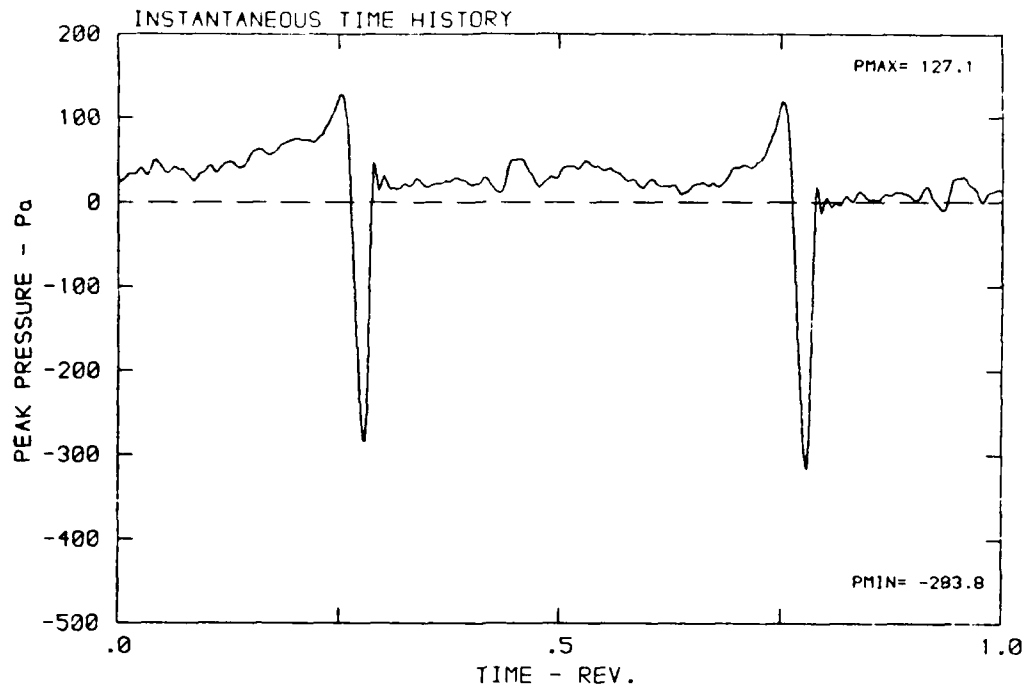
DATA POINT: FC-3 RUN: 129 MP: 3

β : 20.7° MH: .8732 n: 2700 rpm v/u : .268 ϕ : 3.6° T: 288.6 K



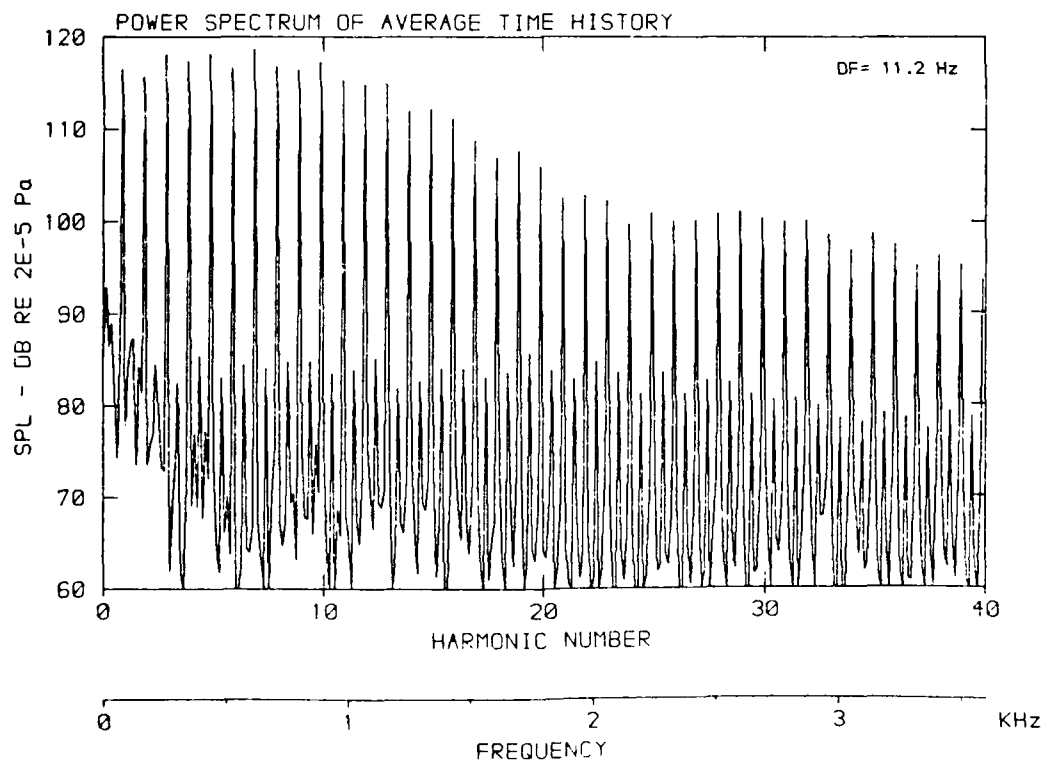
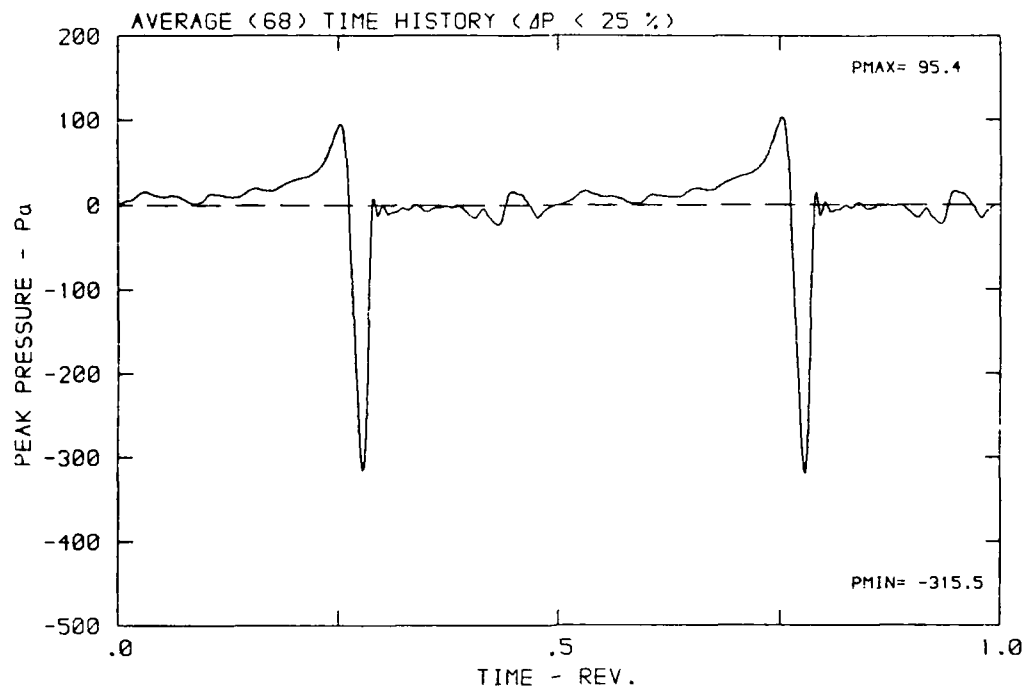
DATA POINT: FC-3 RUN: 129 MP: 4

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 283.6 K



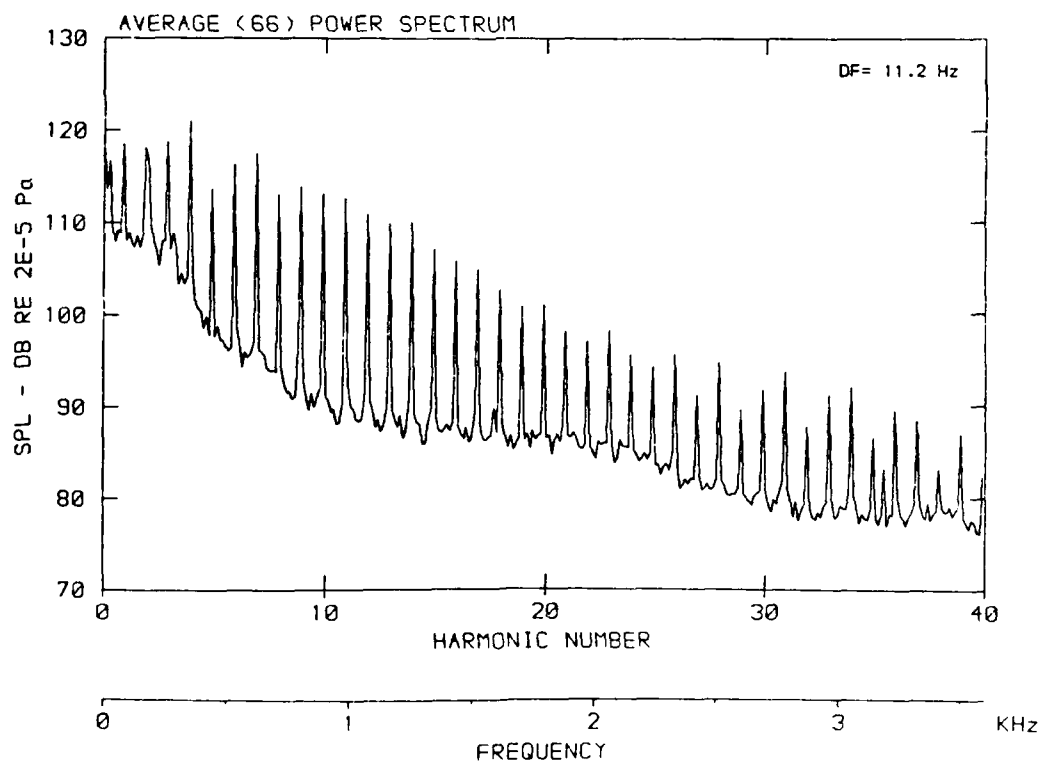
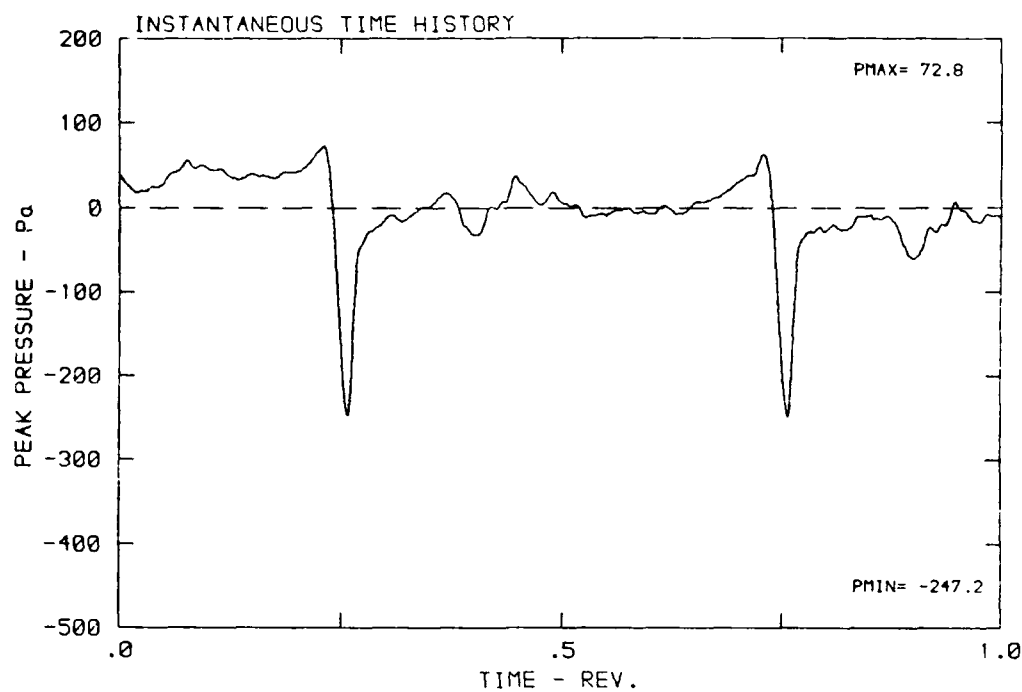
DATA POINT: FC-3 RUN: 129 MP: 4

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



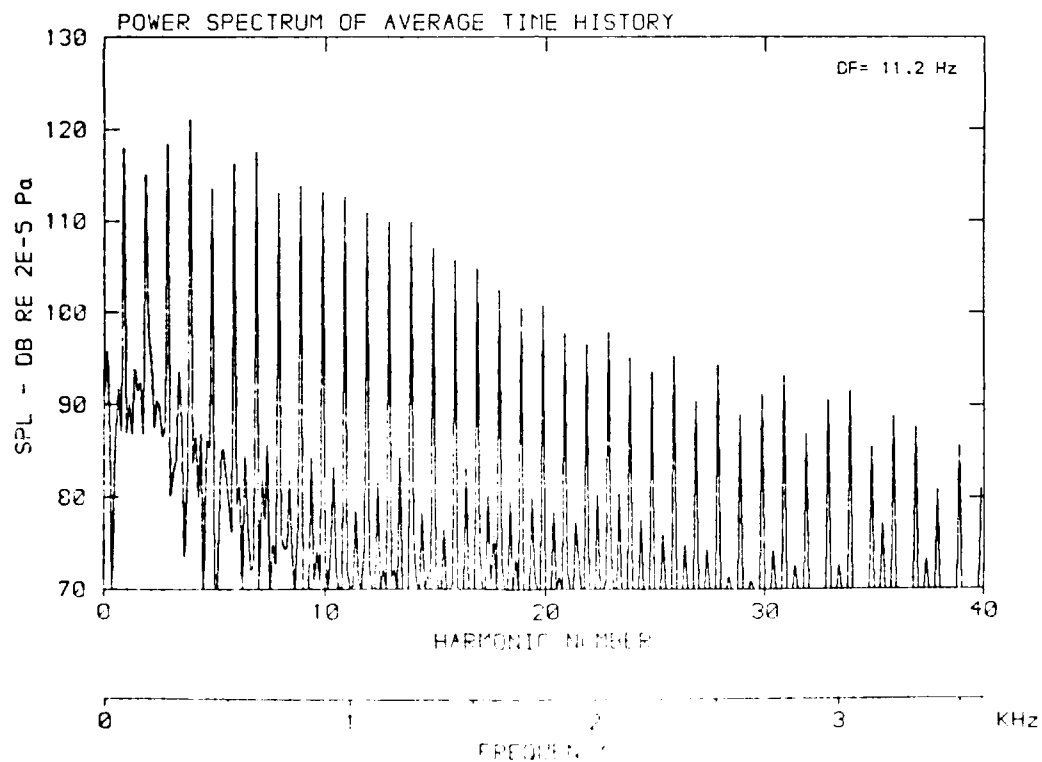
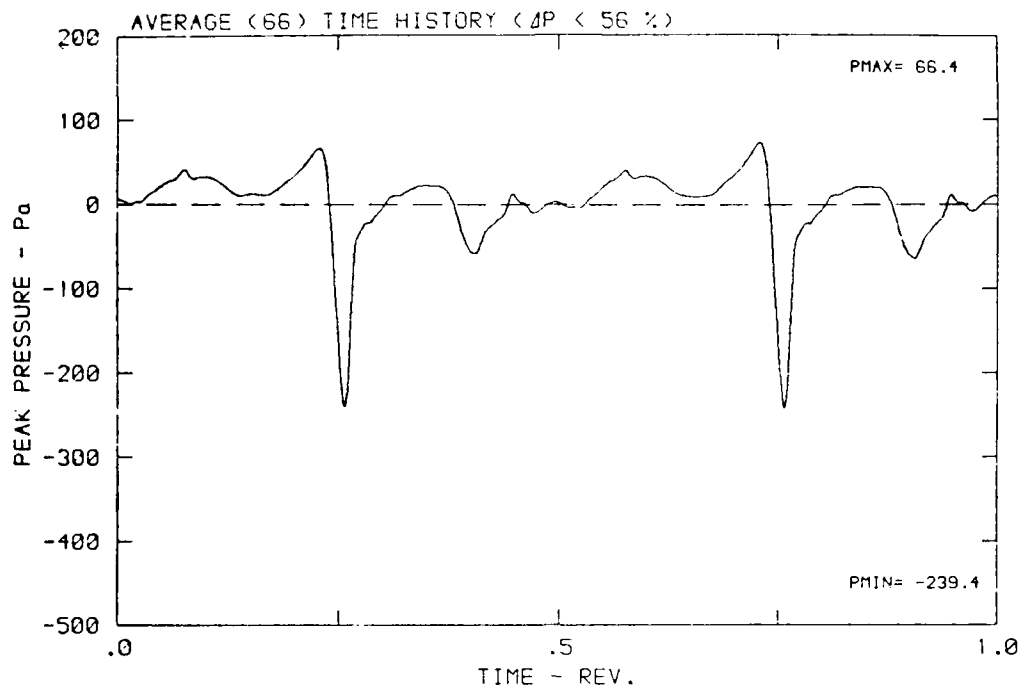
DATA POINT: FC-3 RUN: 129 MP: 5

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



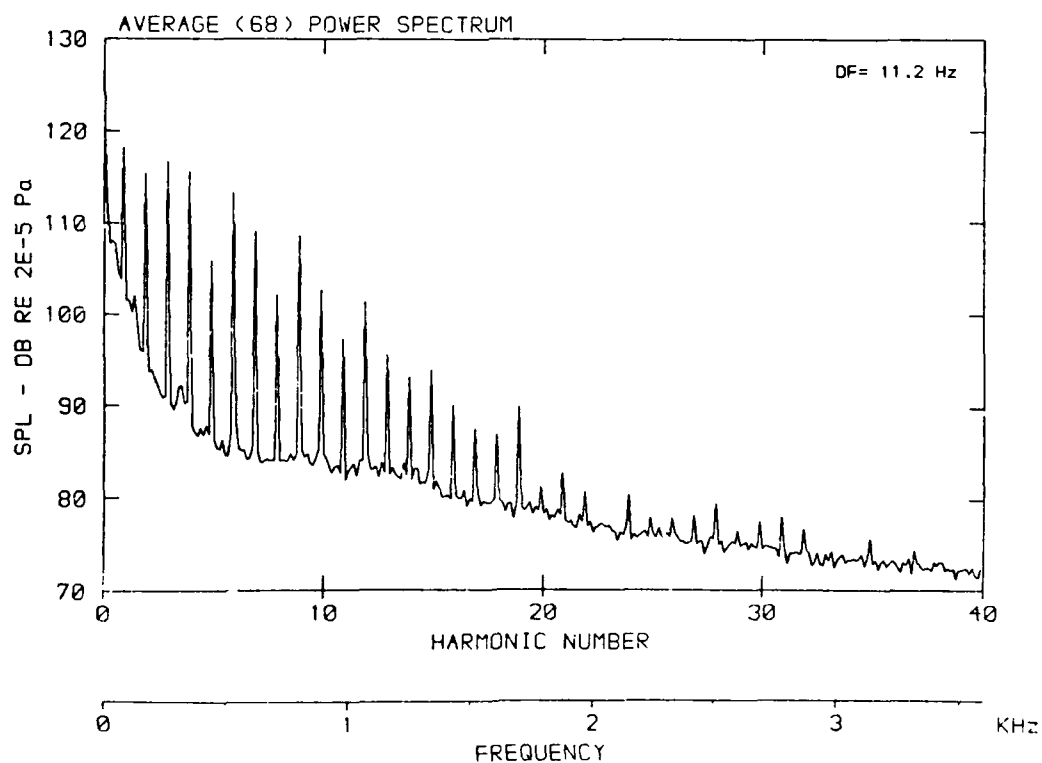
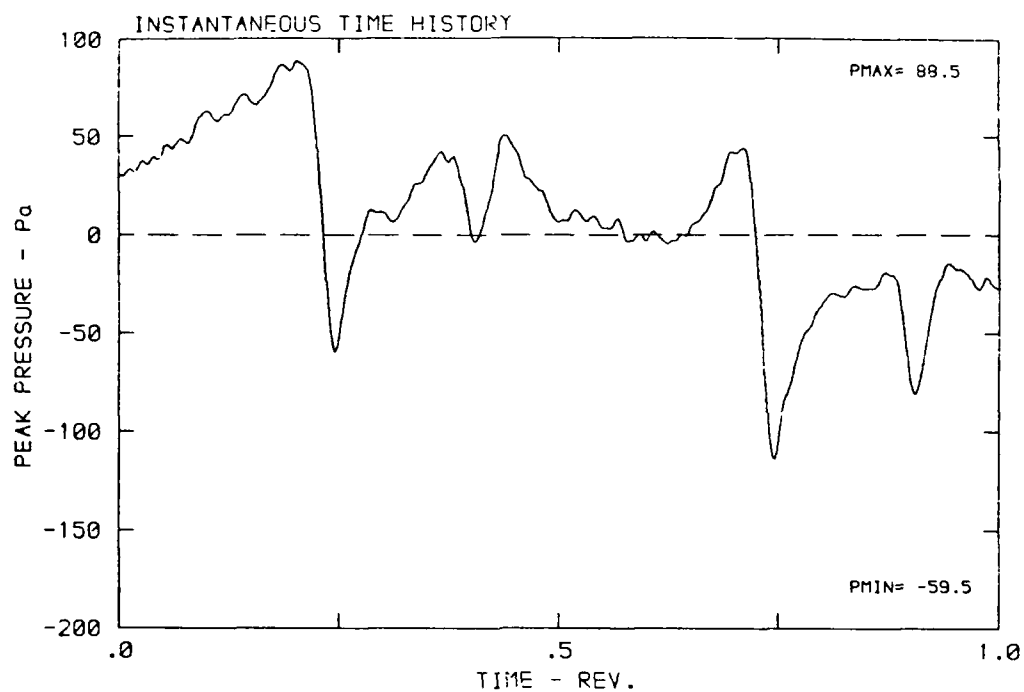
DATA POINT: FC-3 RUN: 129 MP: 5

β : 20.7° MH: .8732 n: 2700 rpm v/u : .268 ϕ : 3.6° T: 288.6 K



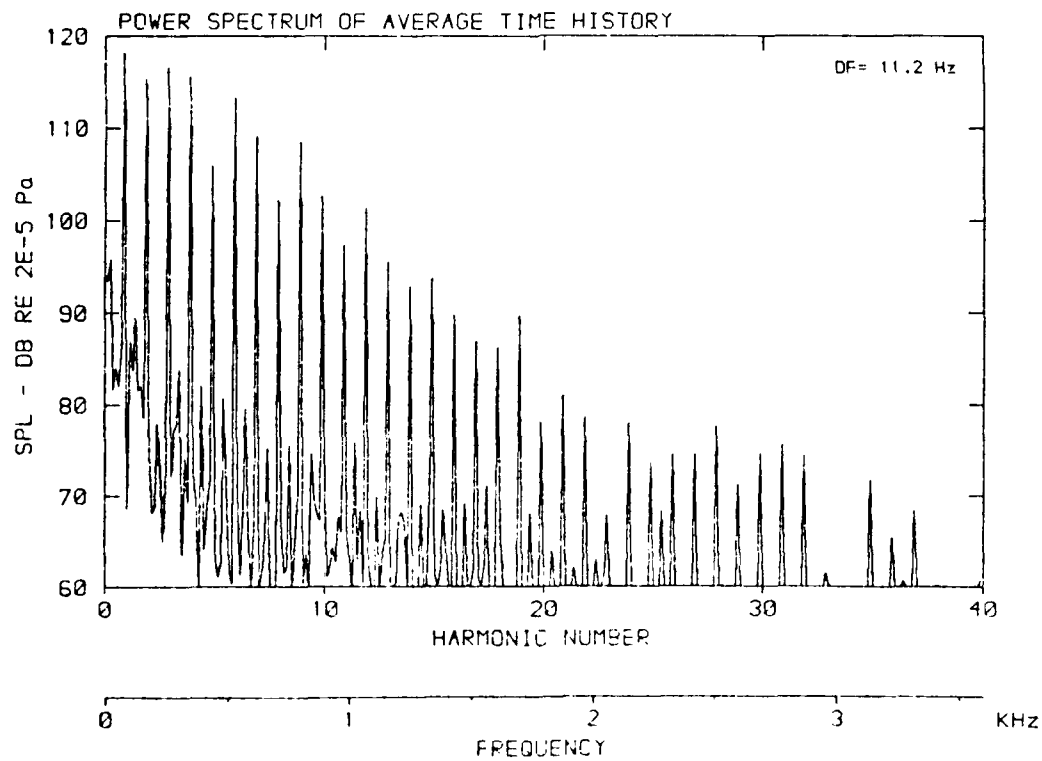
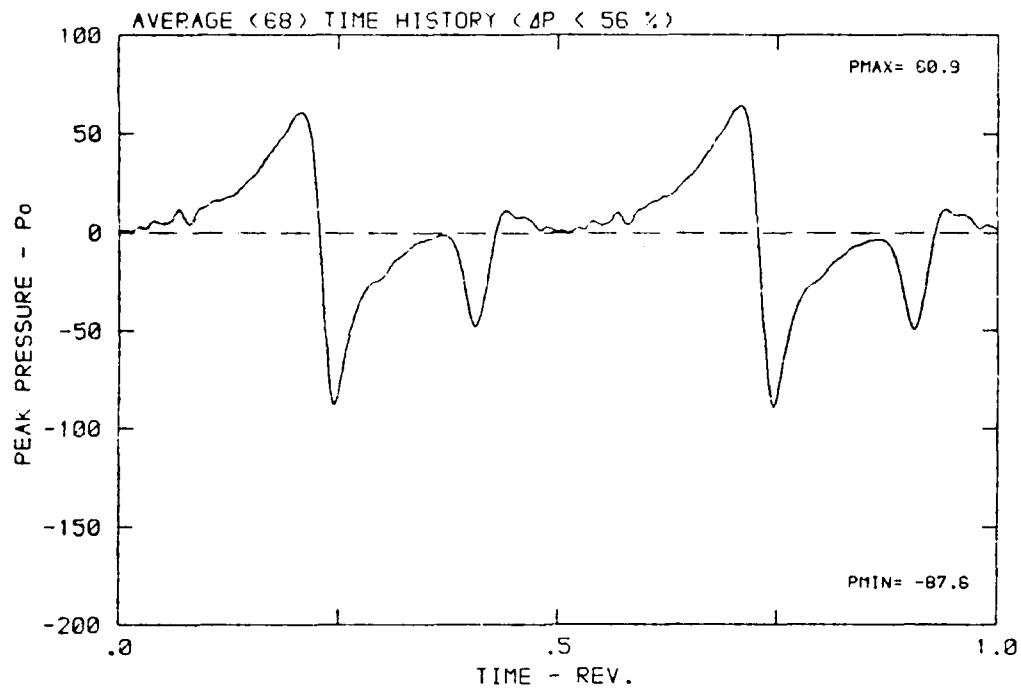
DATA POINT: FC-3 RUN: 129 MP: 6

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



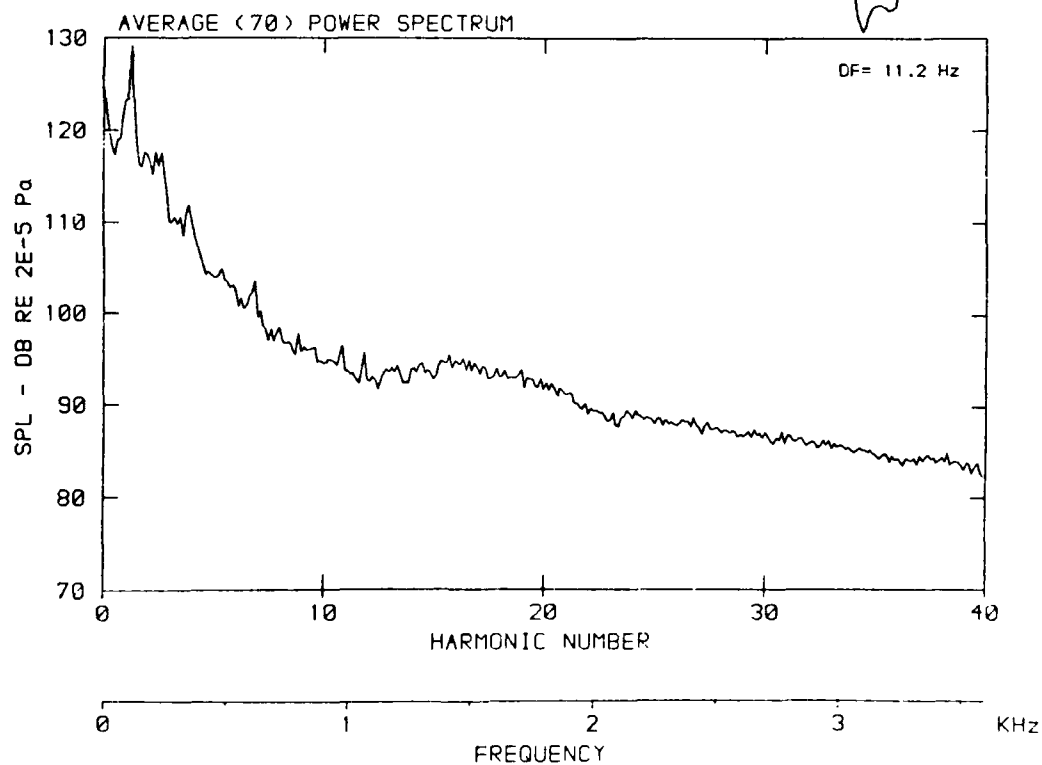
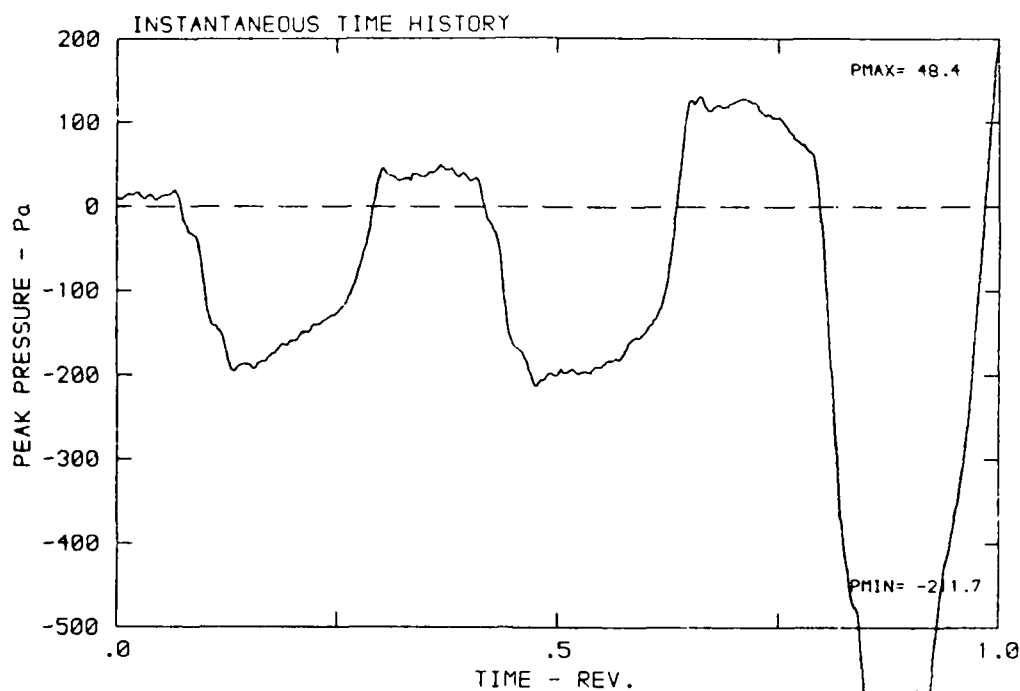
DATA POINT: FC-3 RUN: 129 MP: 6

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



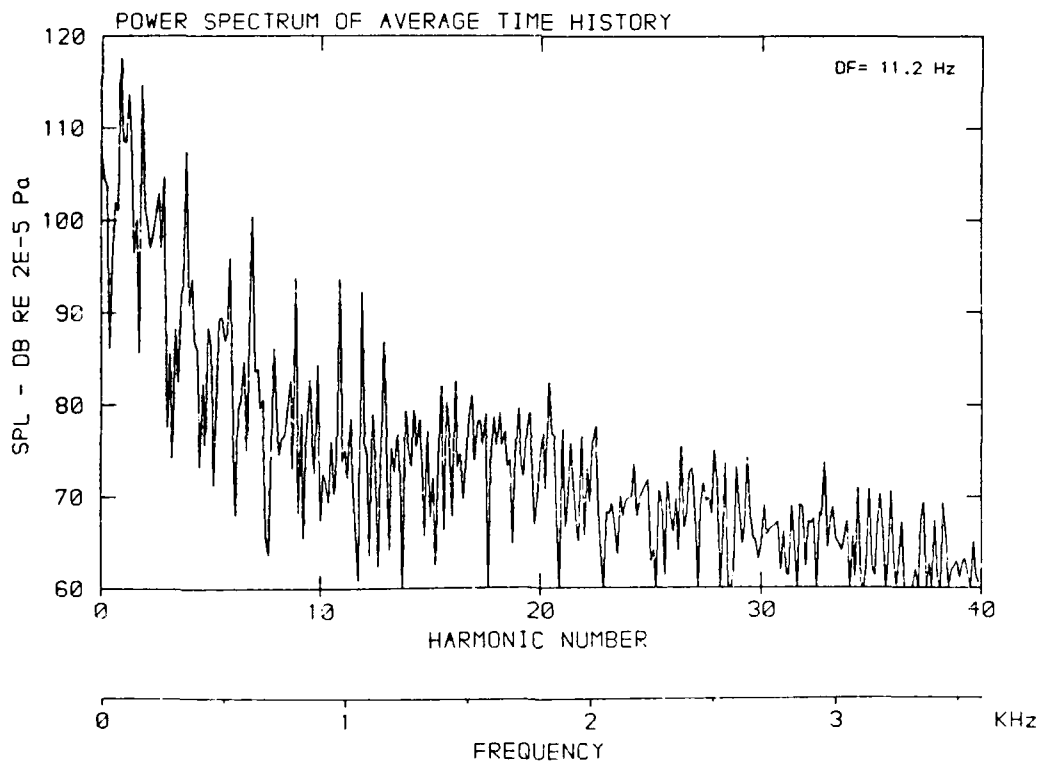
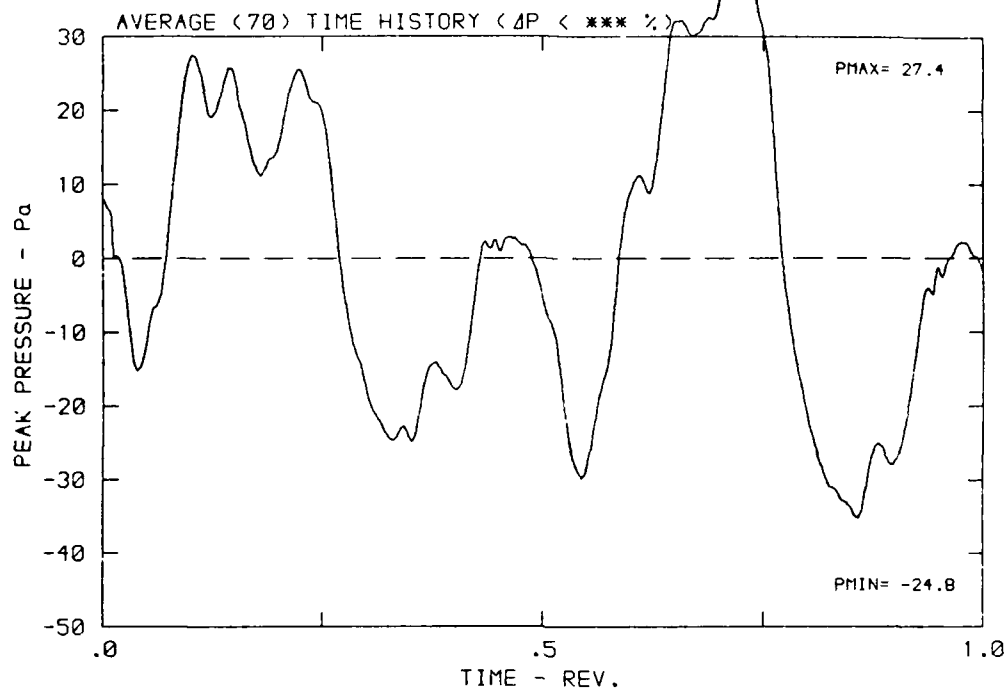
DATA POINT: FC-3 RUN: 129 MP: 7

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



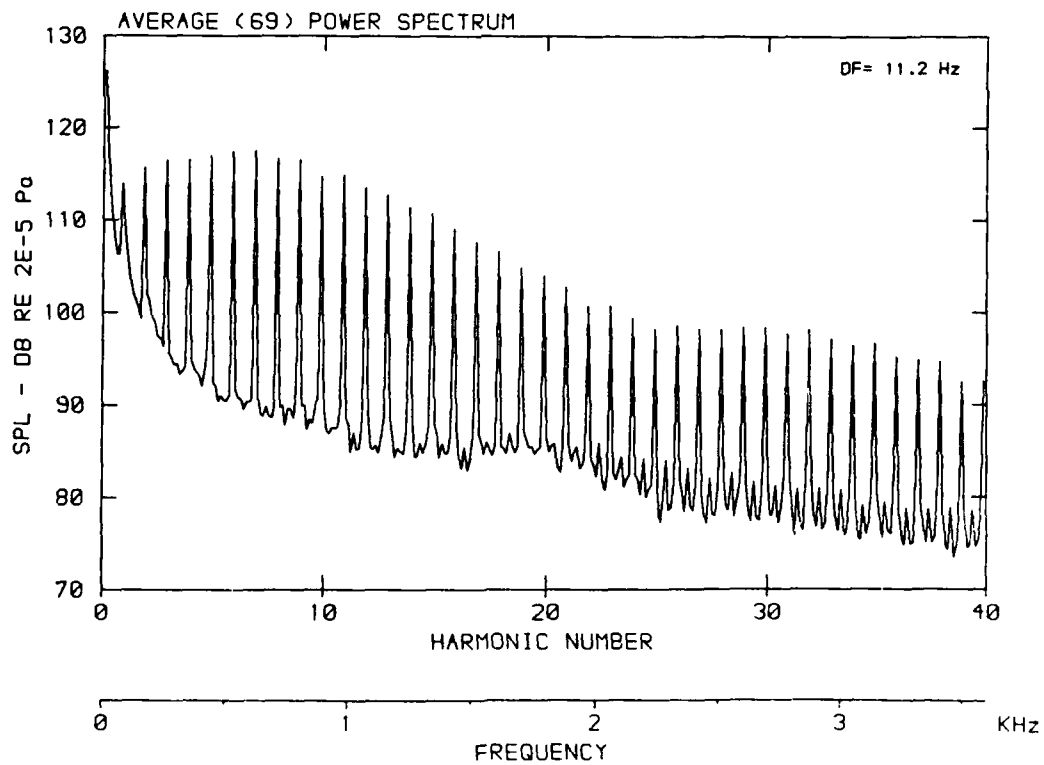
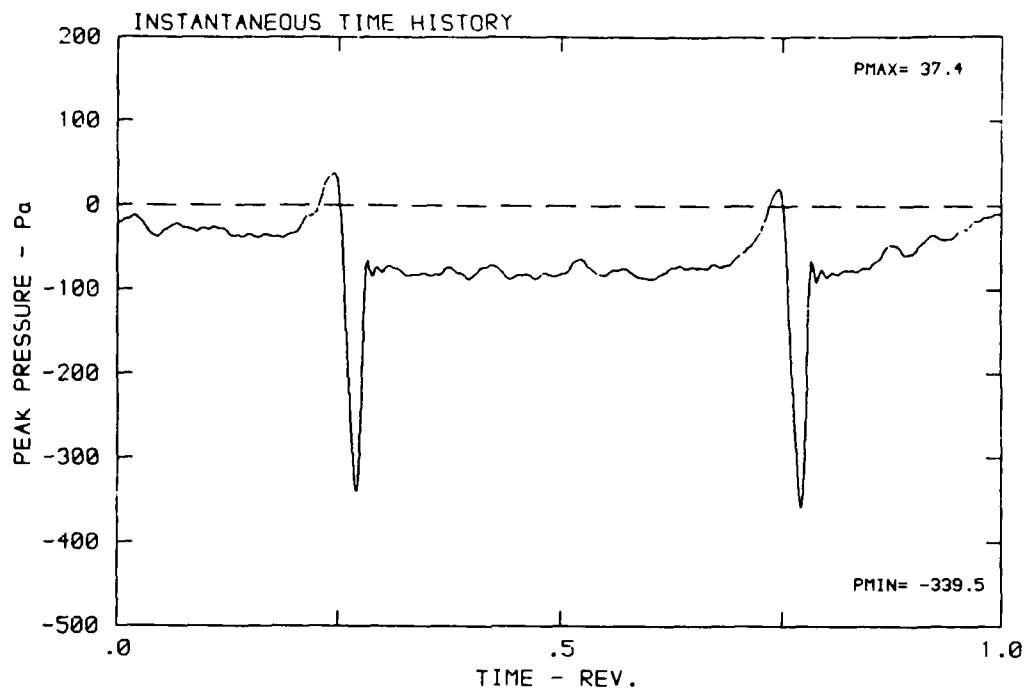
DATA POINT: FC-3 RUN: 129 MP: 7

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



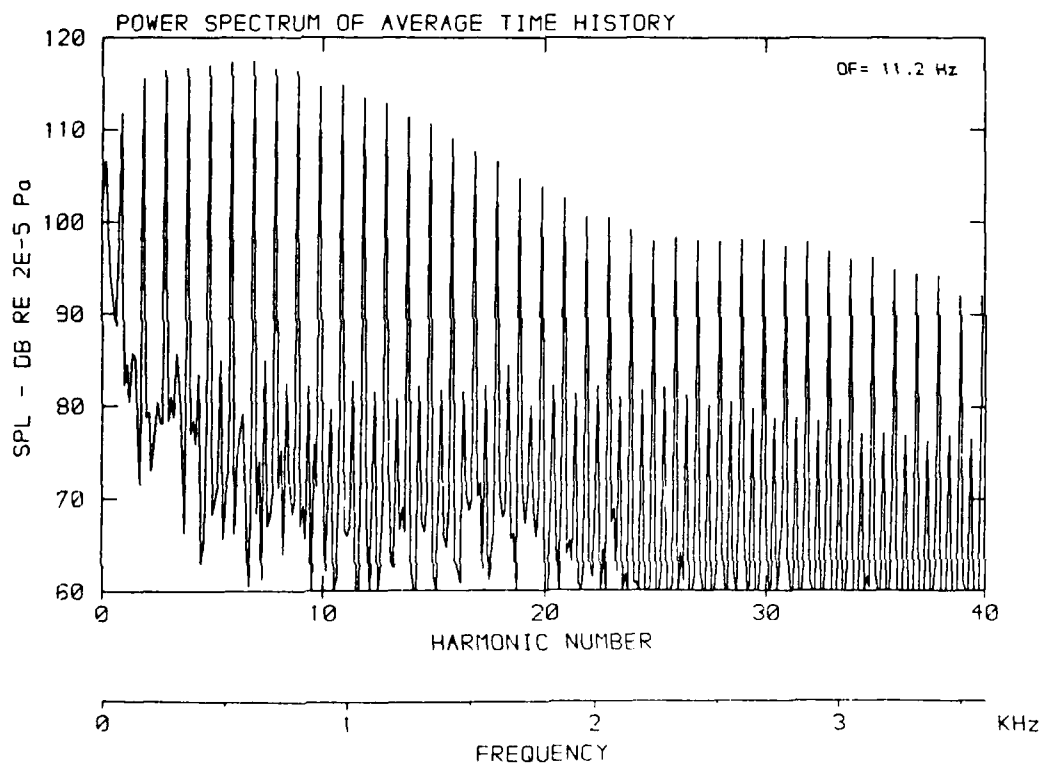
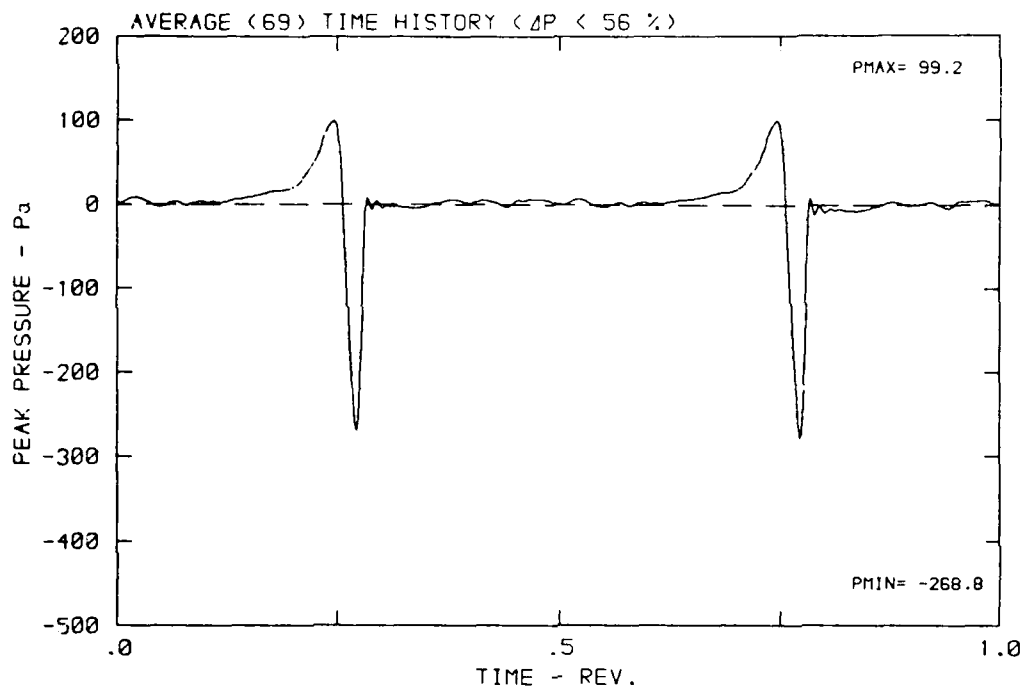
DATA POINT: FC-3 RUN: 129 MP: 8

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



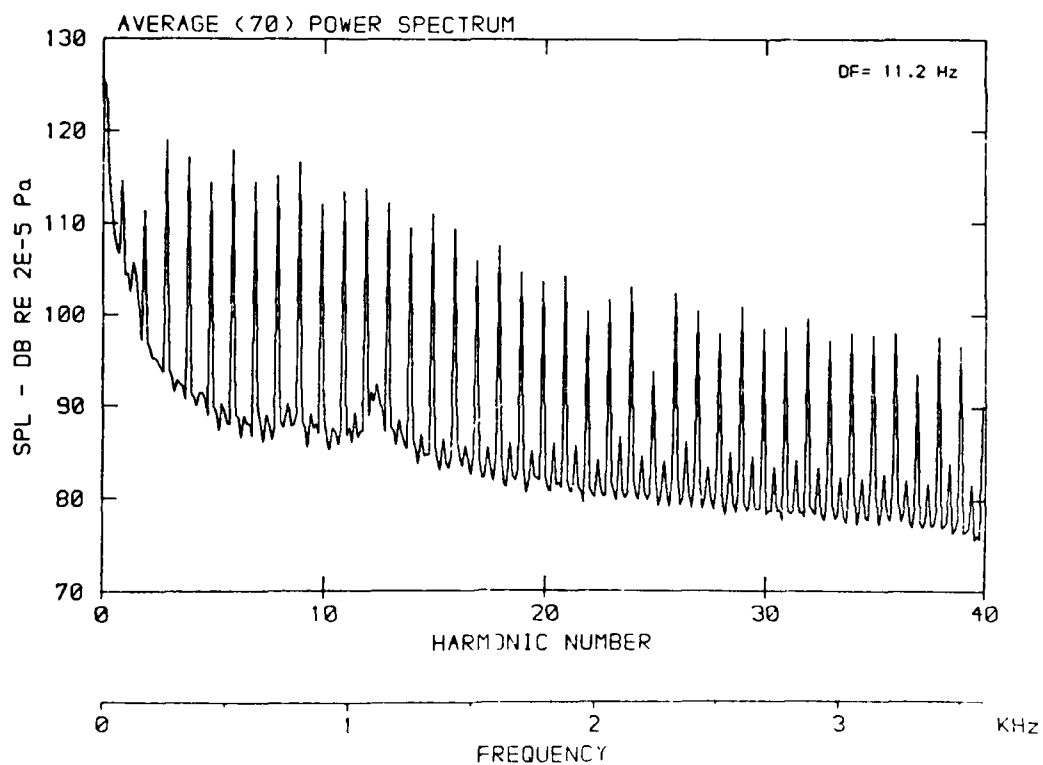
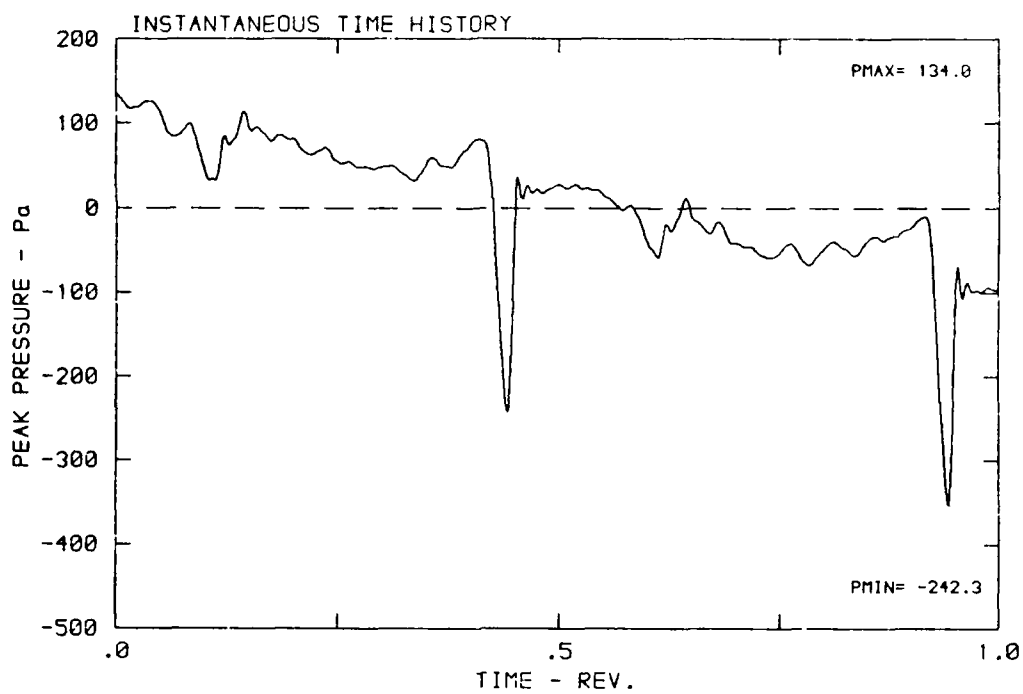
DATA POINT: FC-3 RUN: 129 MP: 8

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



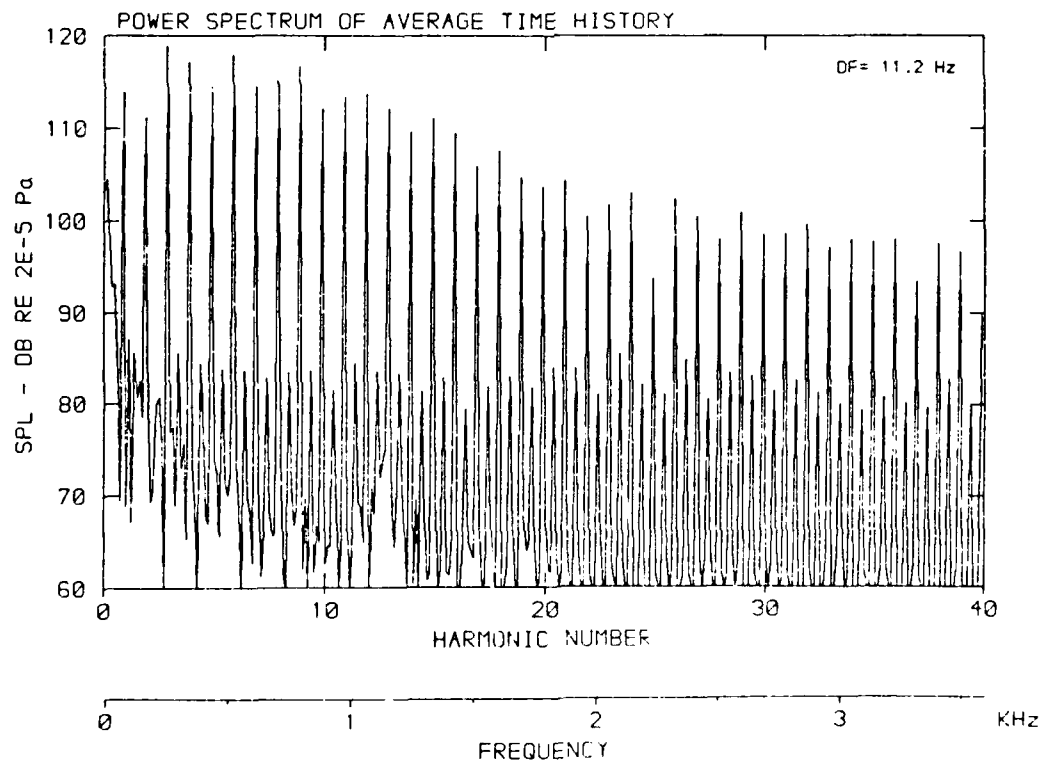
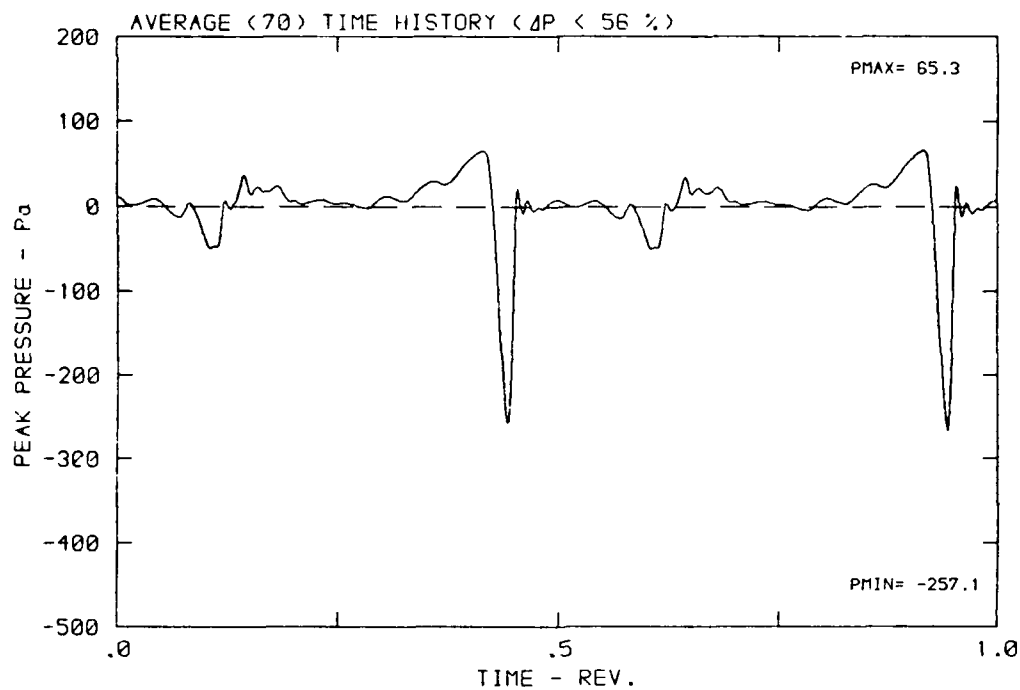
DATA POINT: FC-3 RUN: 129 MP: 9

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



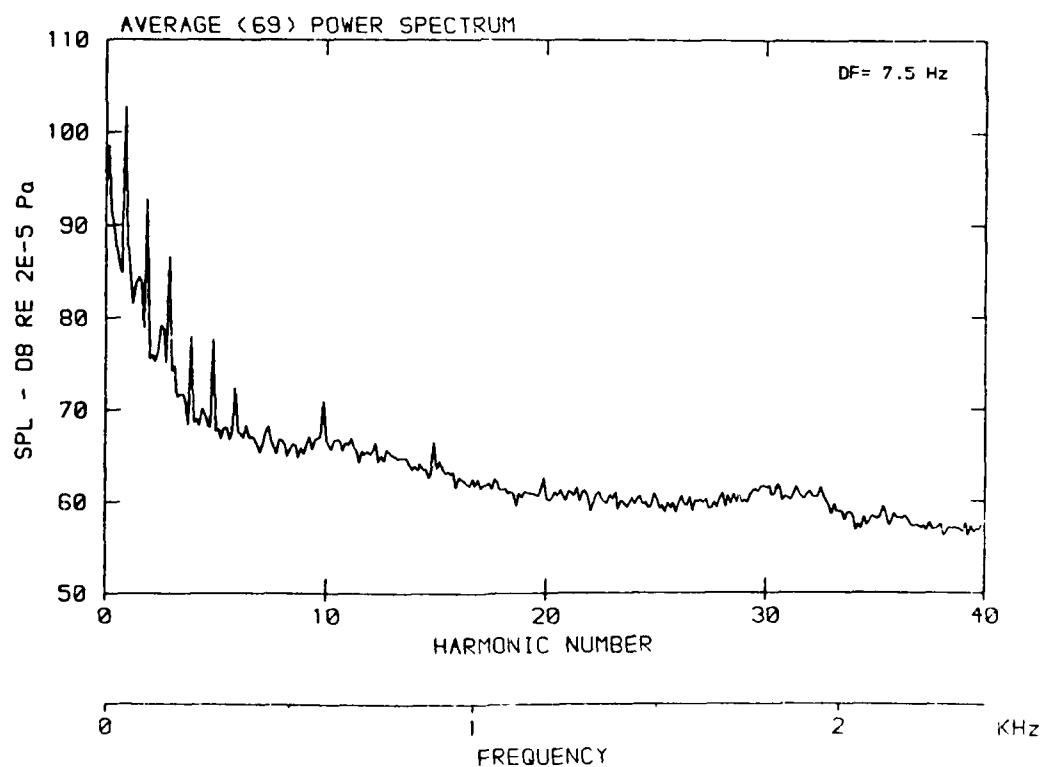
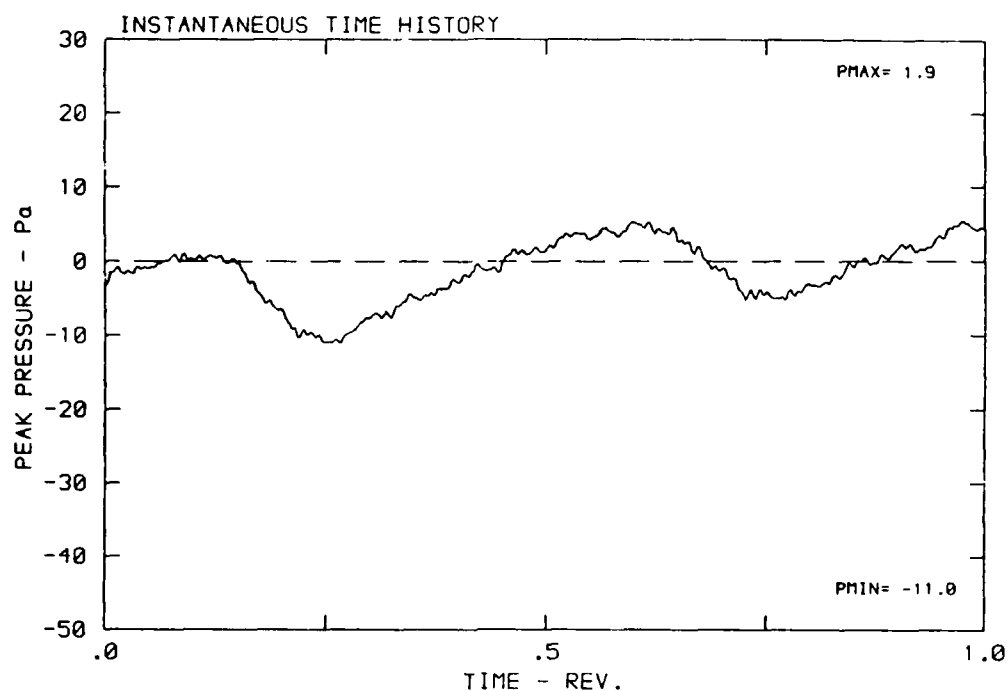
DATA POINT: FC-3 RUN: 129 MP: 9

β : 20.7° MH: .8732 n: 2700 rpm v/u: .268 ϕ : 3.6° T: 288.6 K



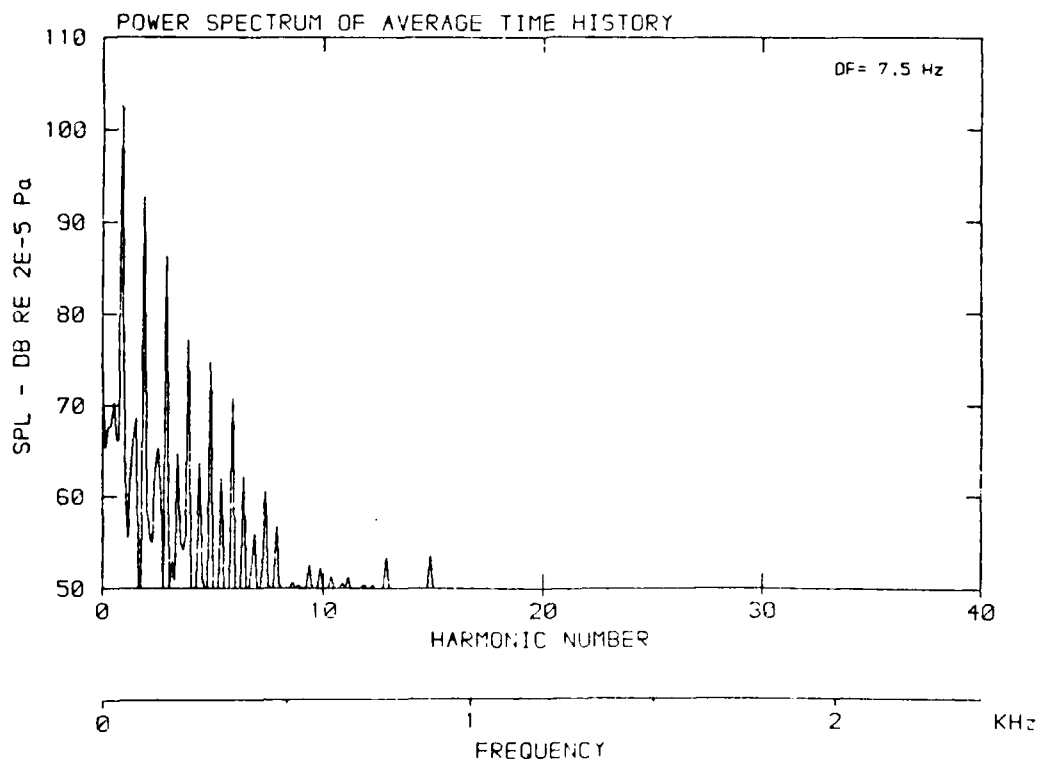
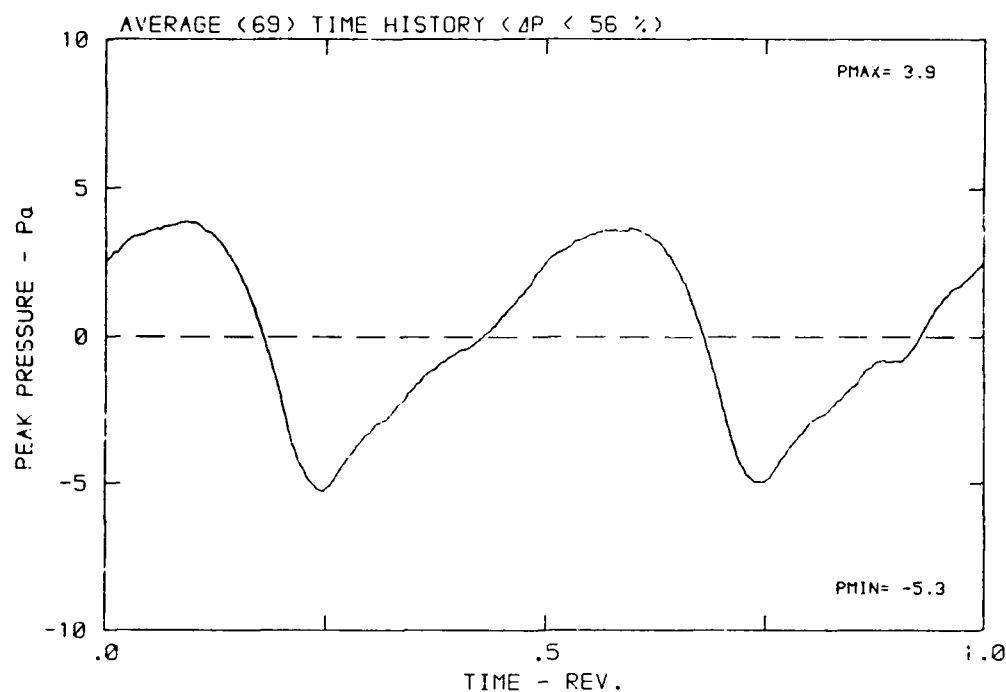
DATA POINT: FC-4 RUN: 124 MP: 1

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 288.0 K



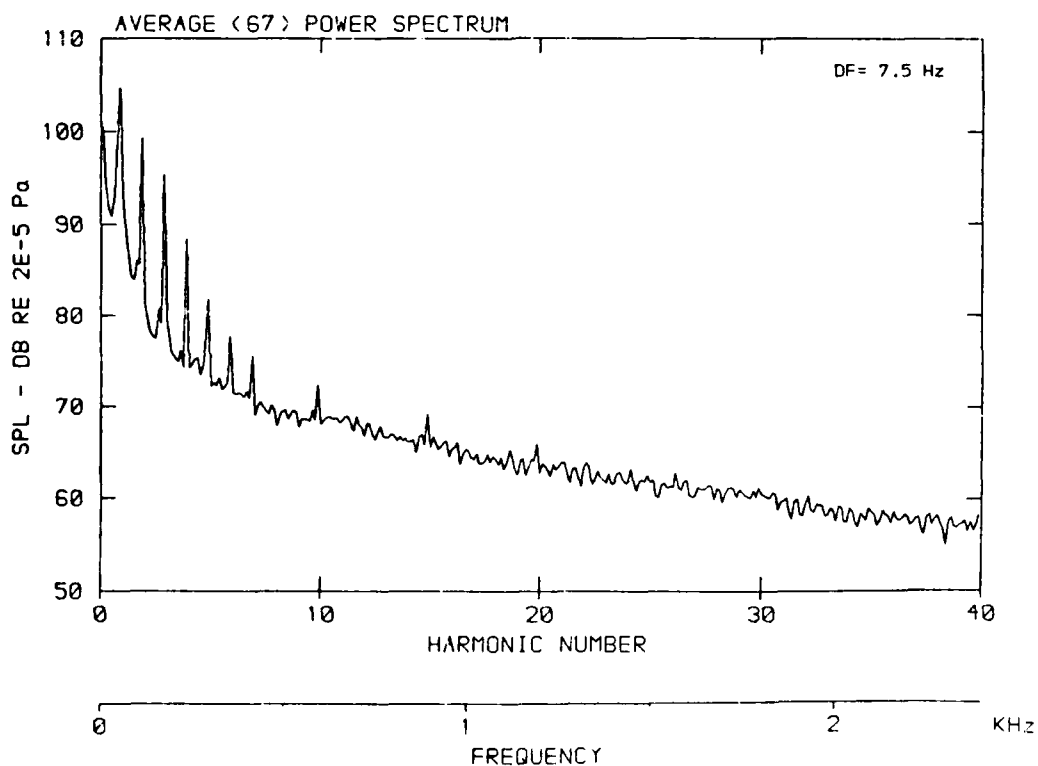
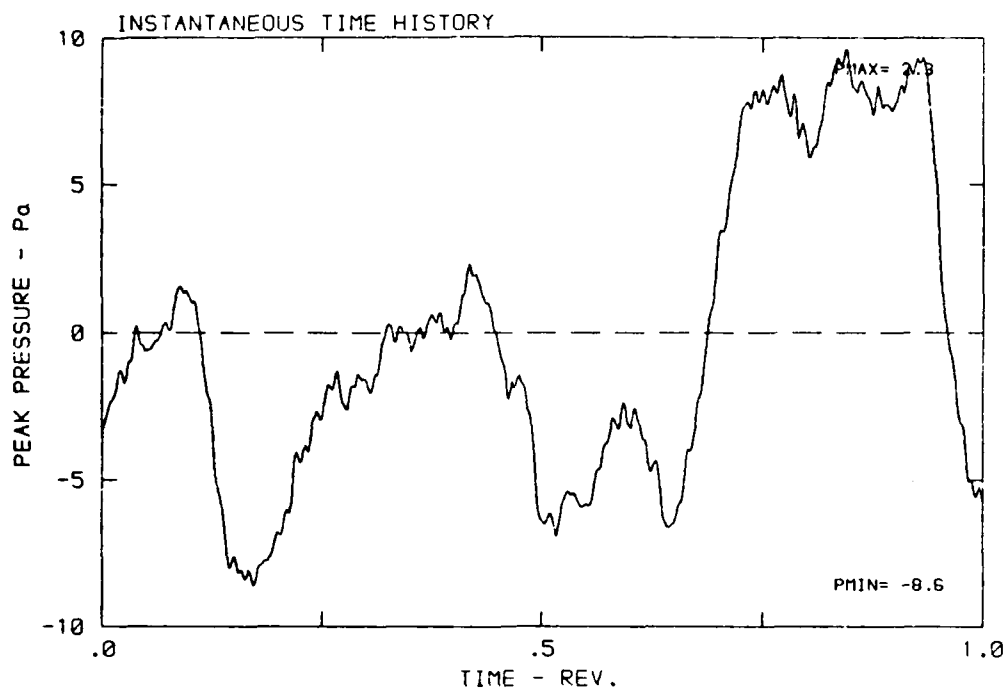
DATA POINT: FC-4 RUN: 124 MP: 1

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



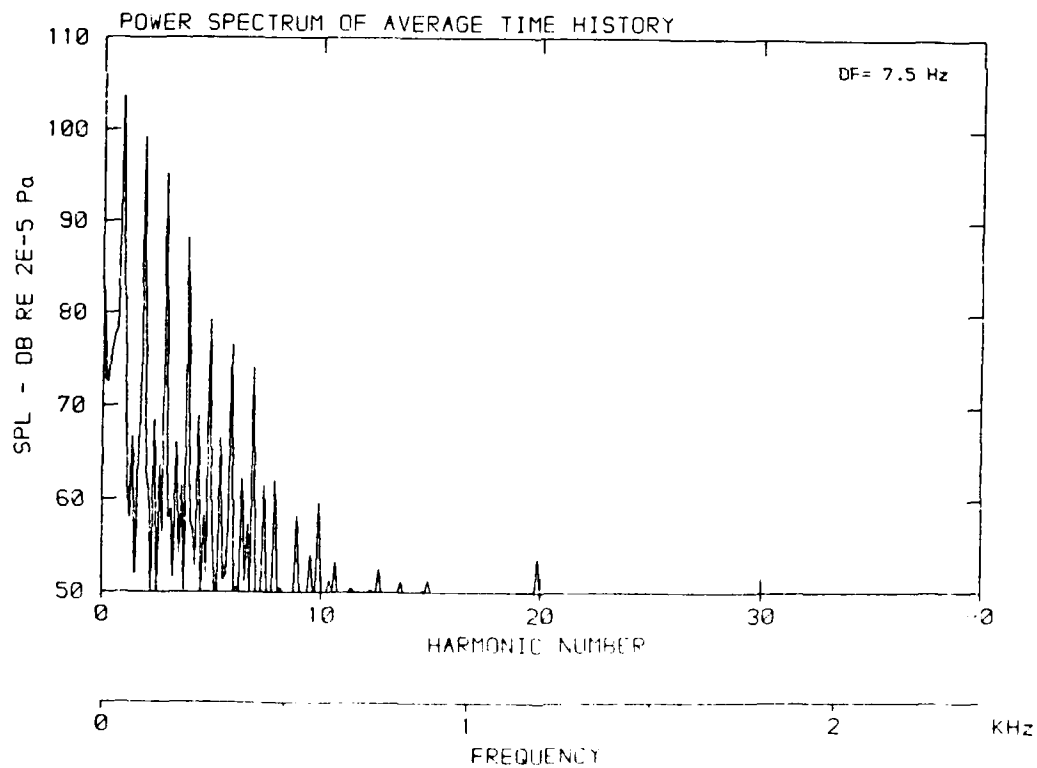
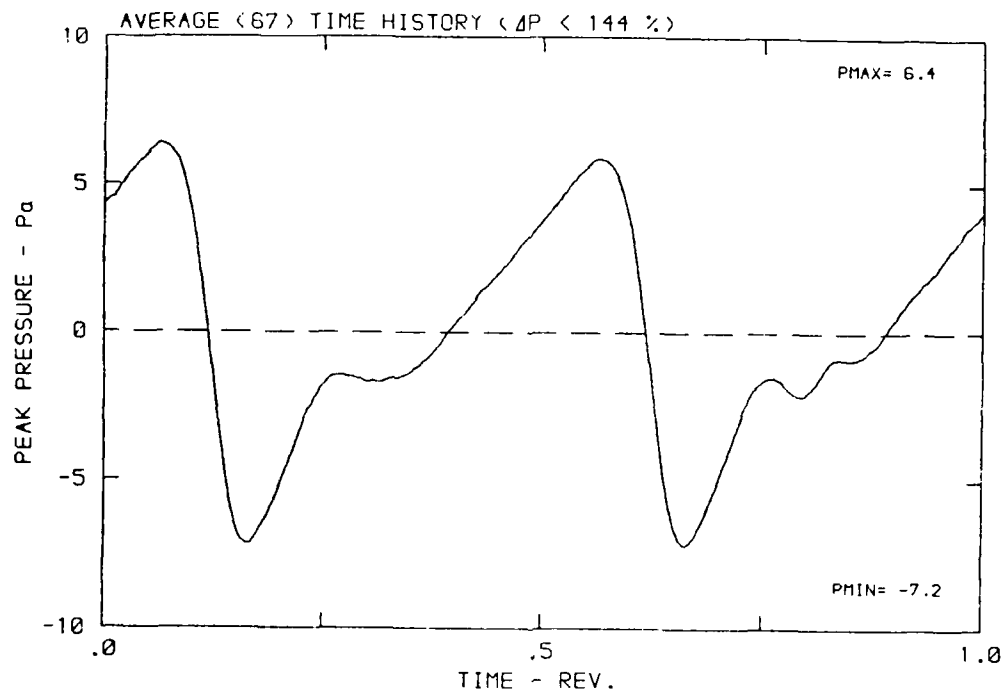
DATA POINT: FC-4 RUN: 124 MP: 2

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 289.0 K



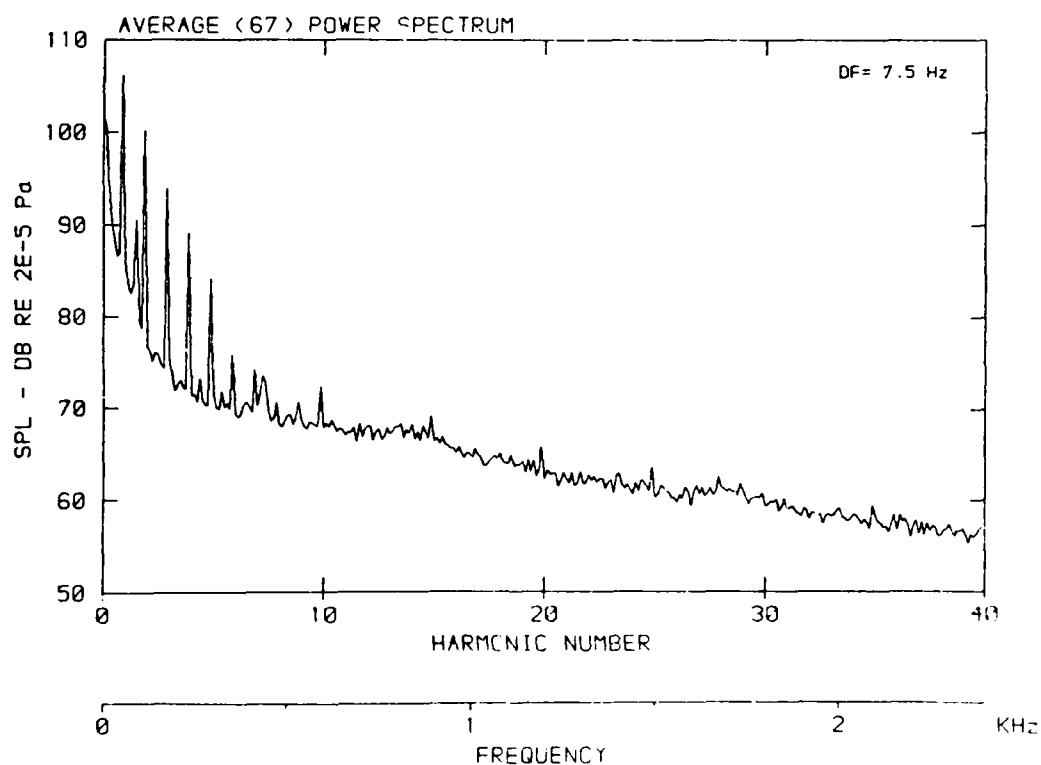
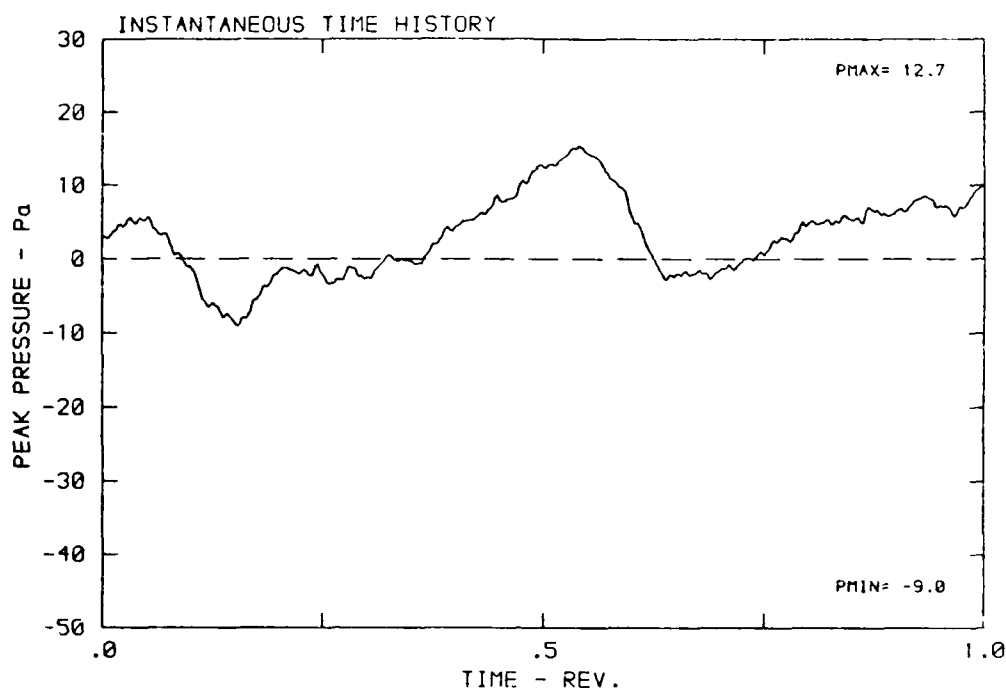
DATA POINT: FC-4 RUN: 124 MP: 2

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 288.0 K



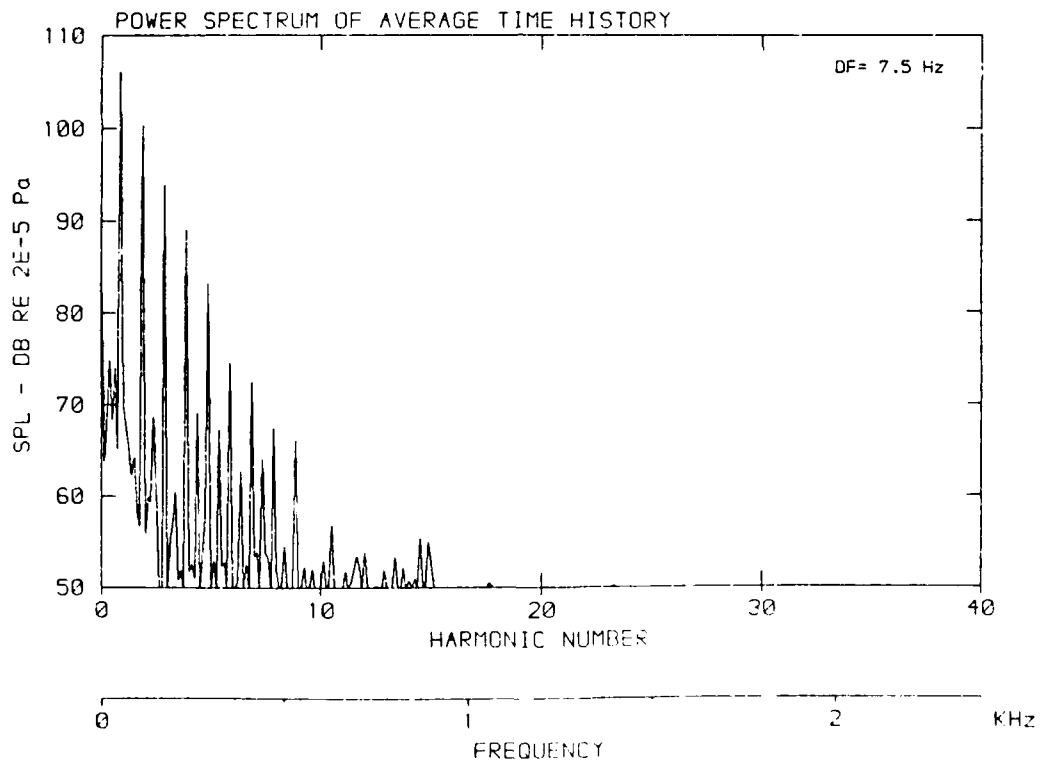
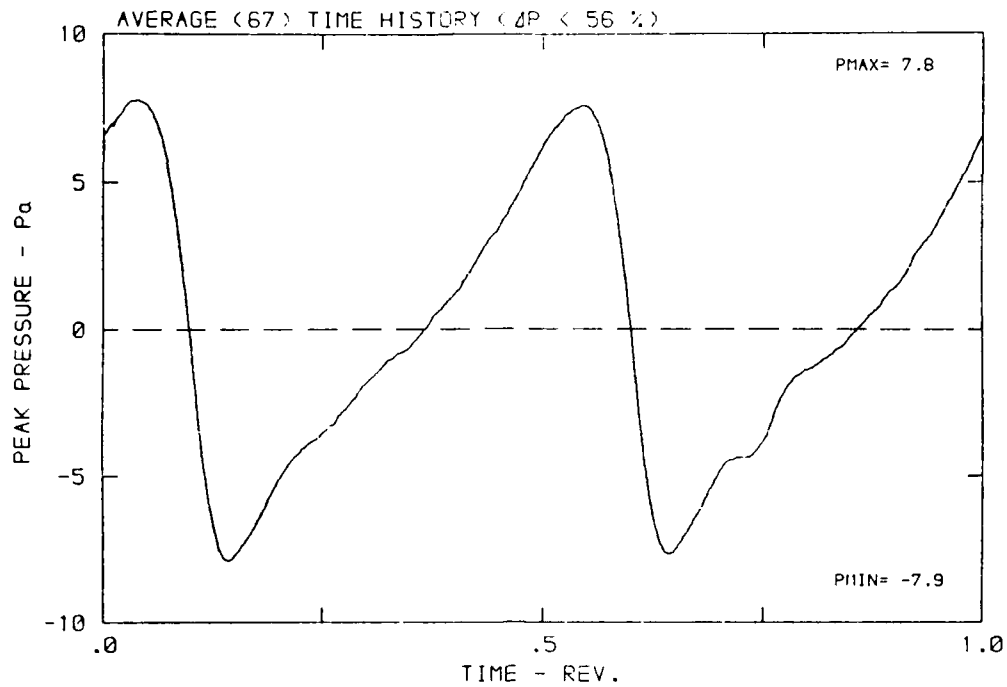
DATA POINT: FC-4 RUN: 124 MP: 3

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 283.0 K



DATA POINT: FC-4 RUN: 124 MP: 3

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 288.0 K



AD-A174 981

DFVLR/FAR (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER
LUFT UND RAUMFAHR (U) DEUTSCHE FORSCHUNGS- UND
VERSUCHSANSTALT FUER LUFT- UND RAUMF

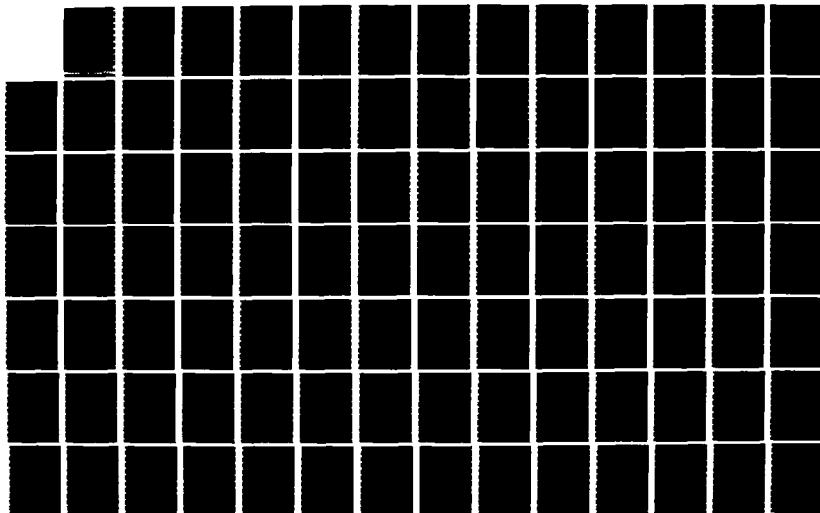
4/8

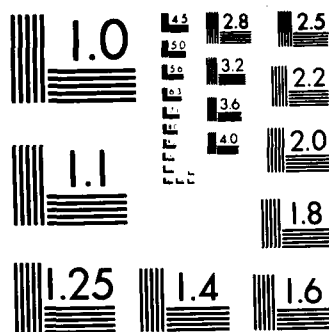
UNCLASSIFIED

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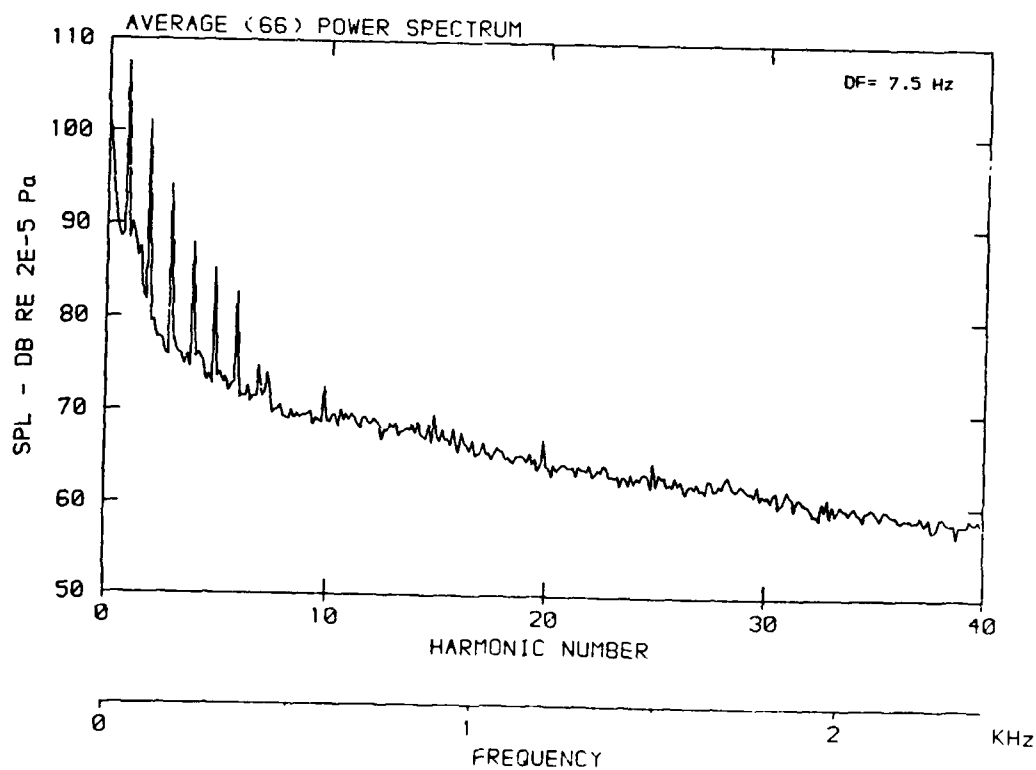
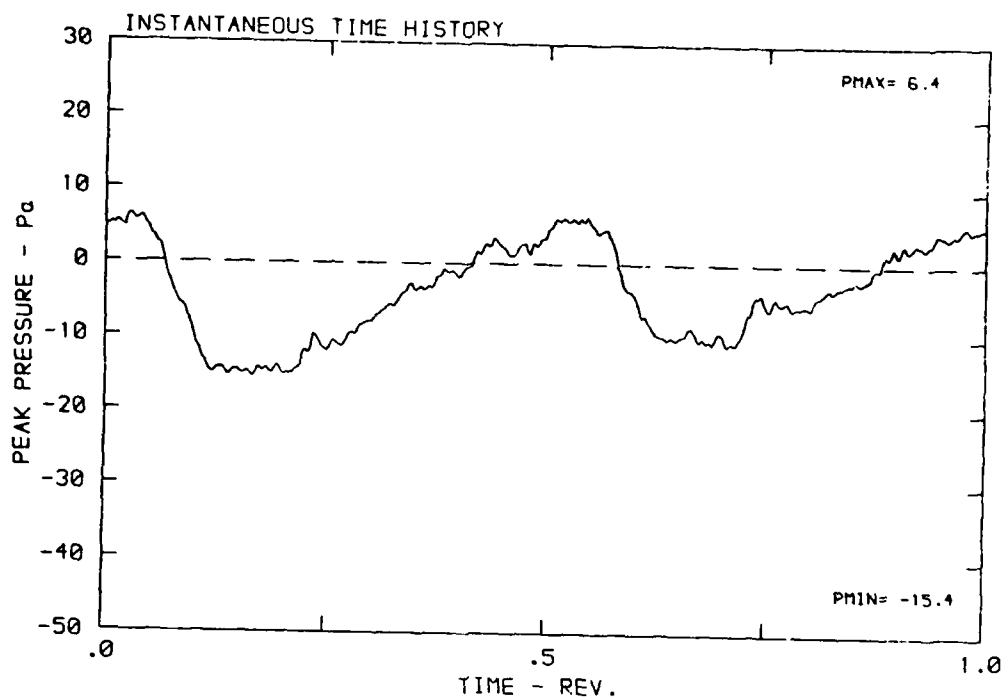




MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

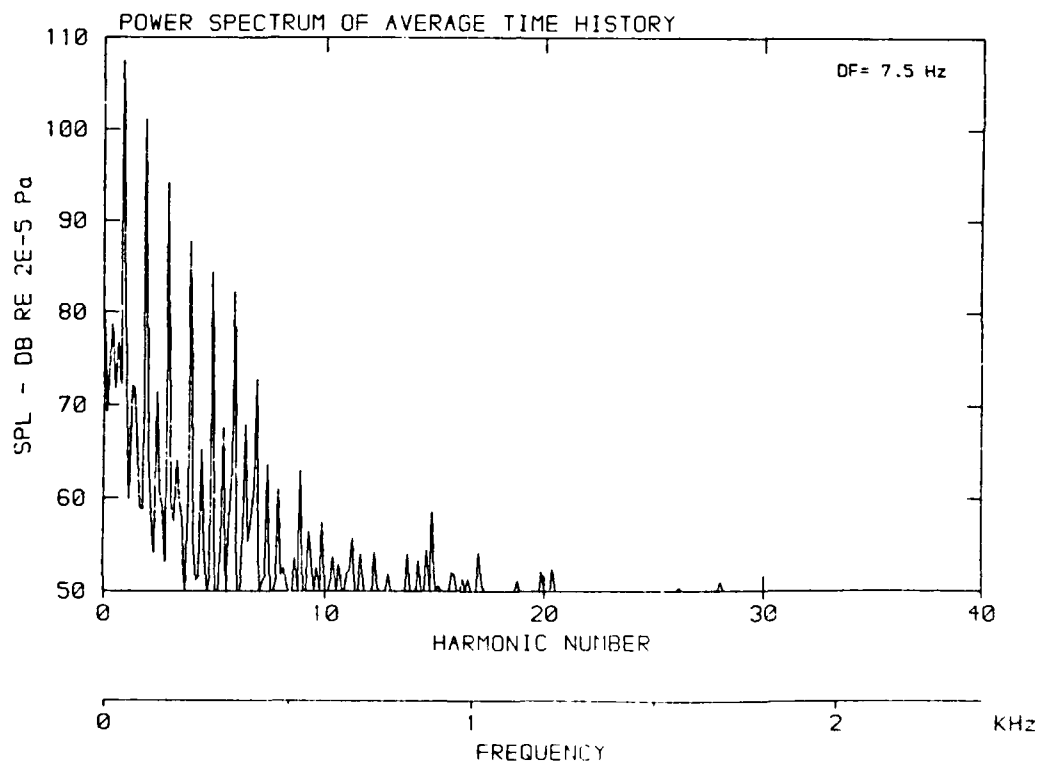
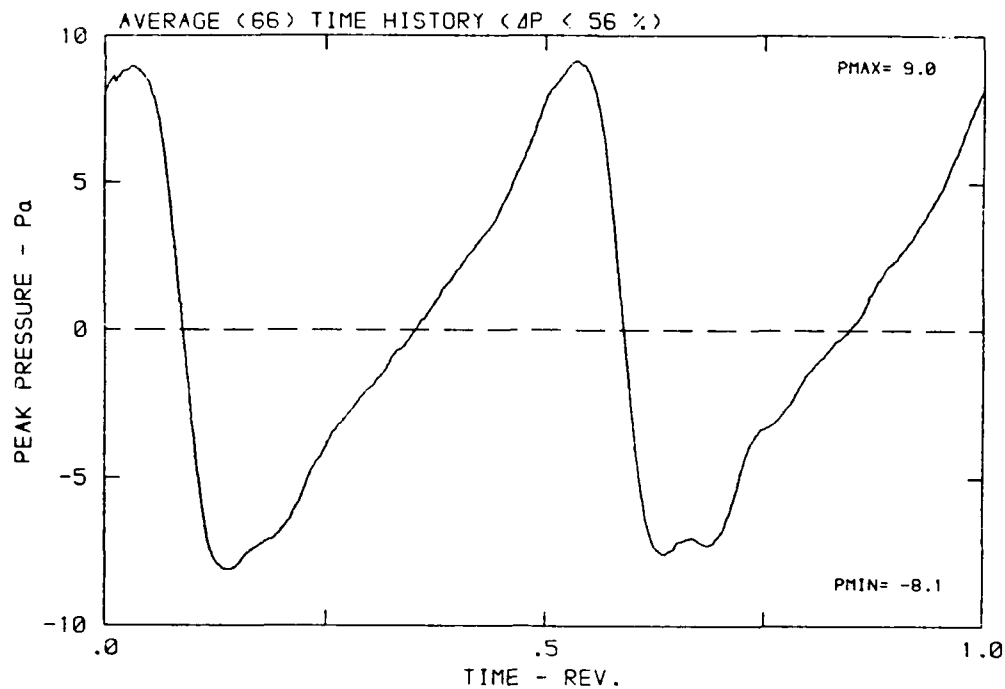
DATA POINT: FC-4 RUN: 124 MP: 4

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 288.0 K



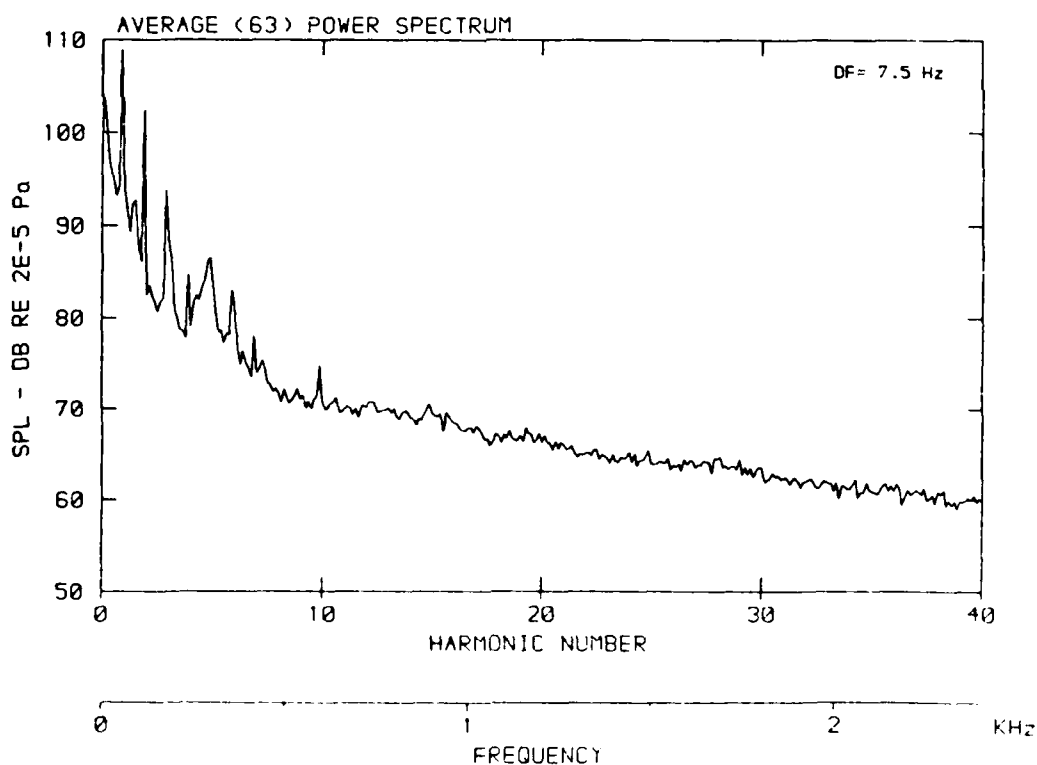
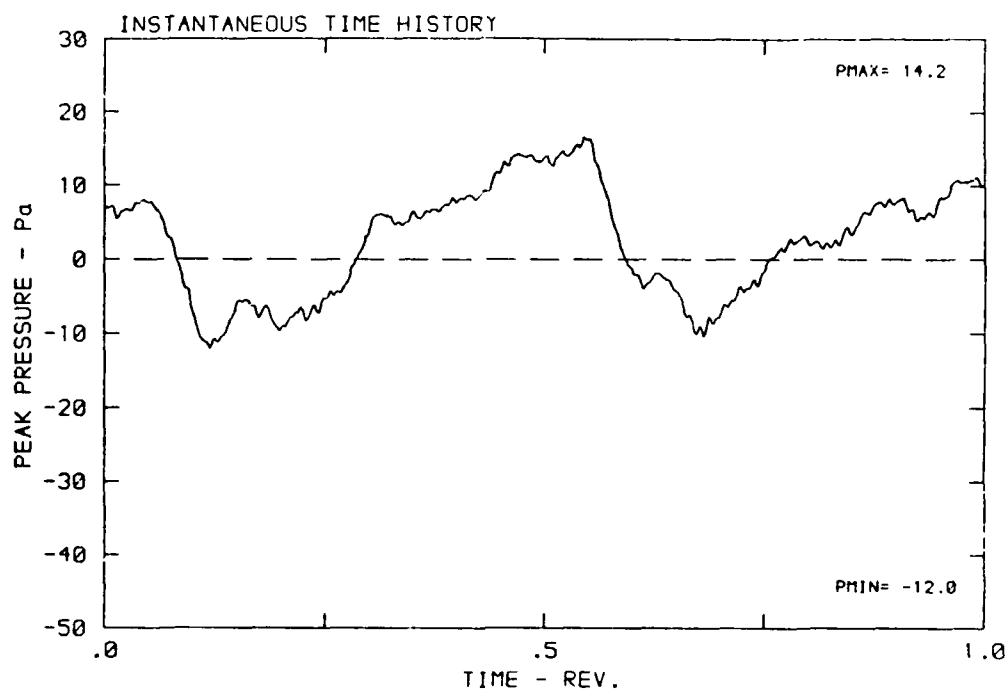
DATA POINT: FC-4 RUN: 124 MP: 4

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



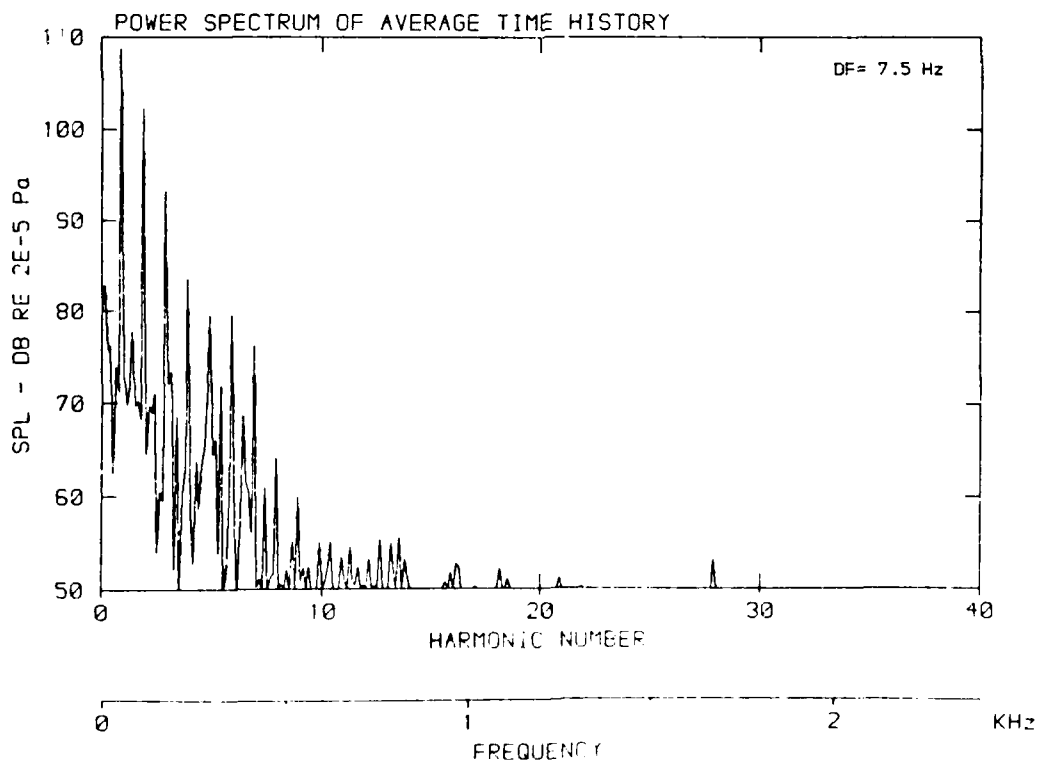
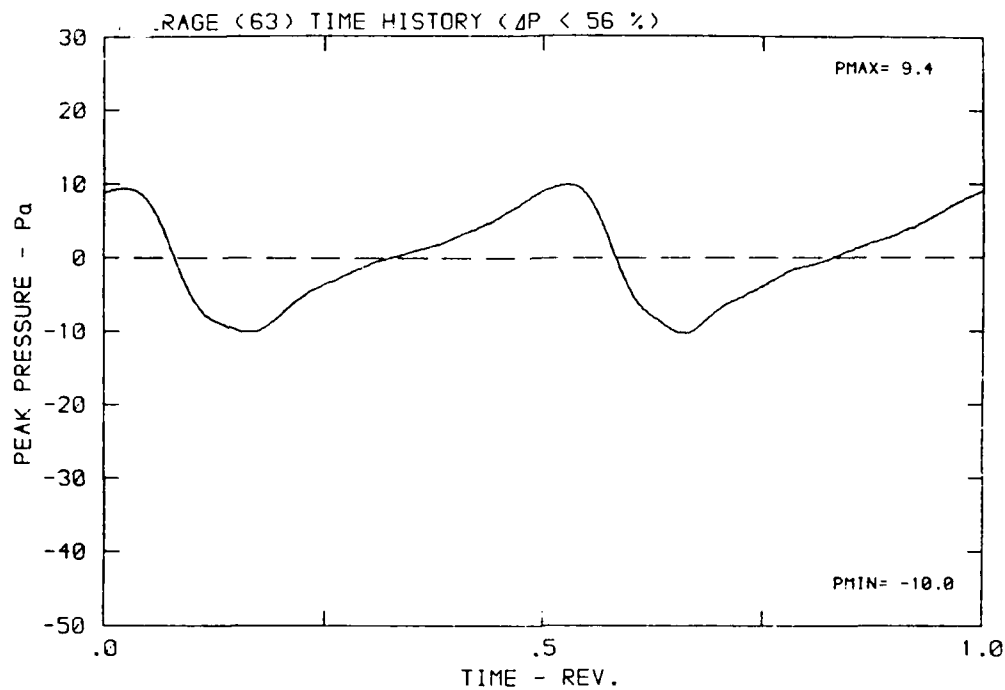
DATA POINT: FC-4 RUN: 124 MP: 5

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° Γ : 288.0 K



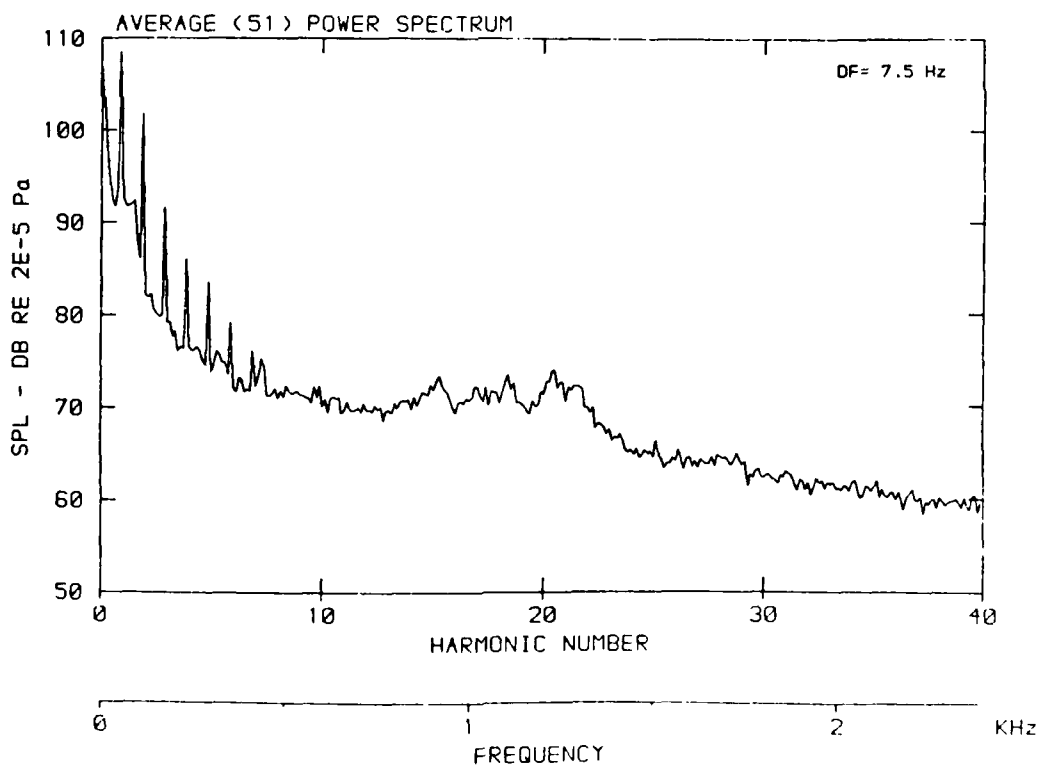
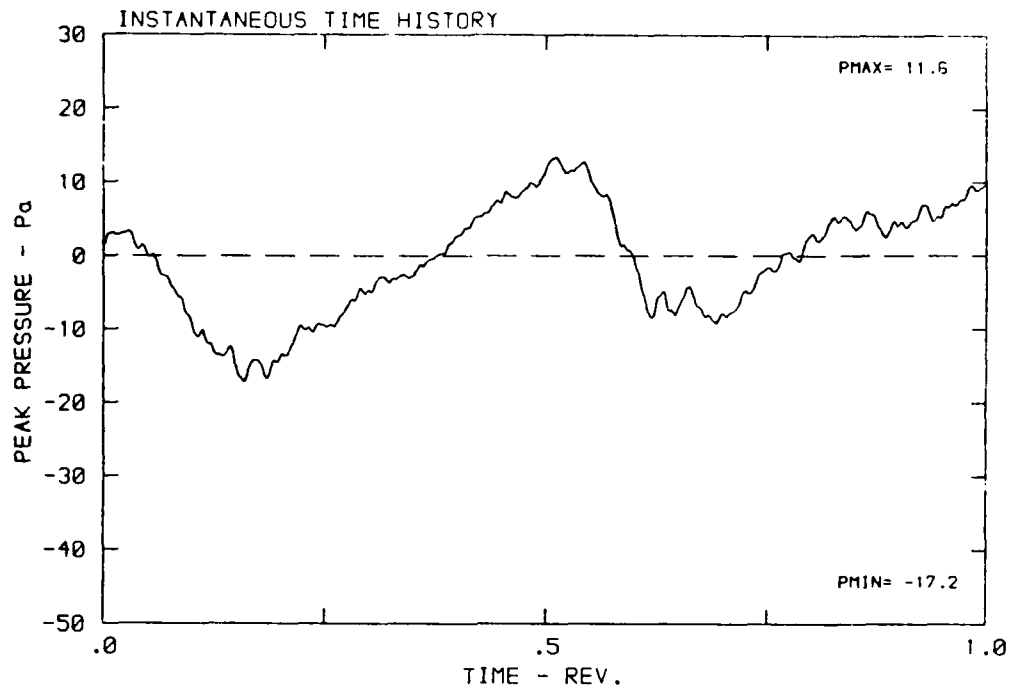
DATA POINT: FC-4 RUN: 124 MP: 5

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 288.0 K



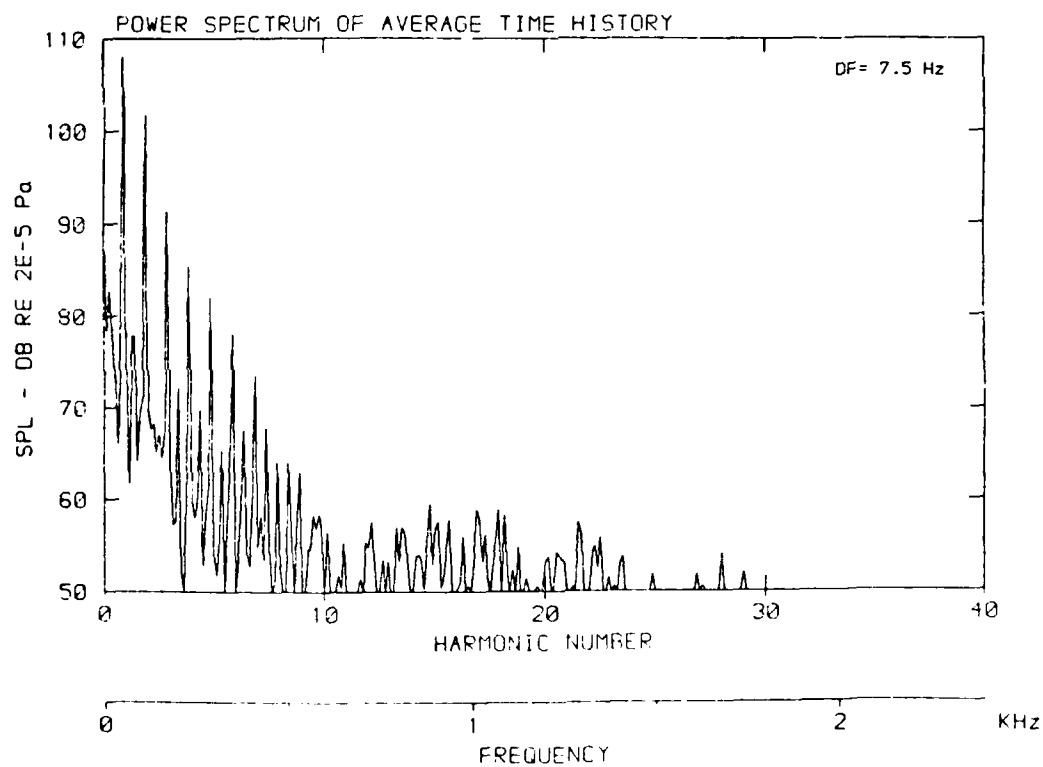
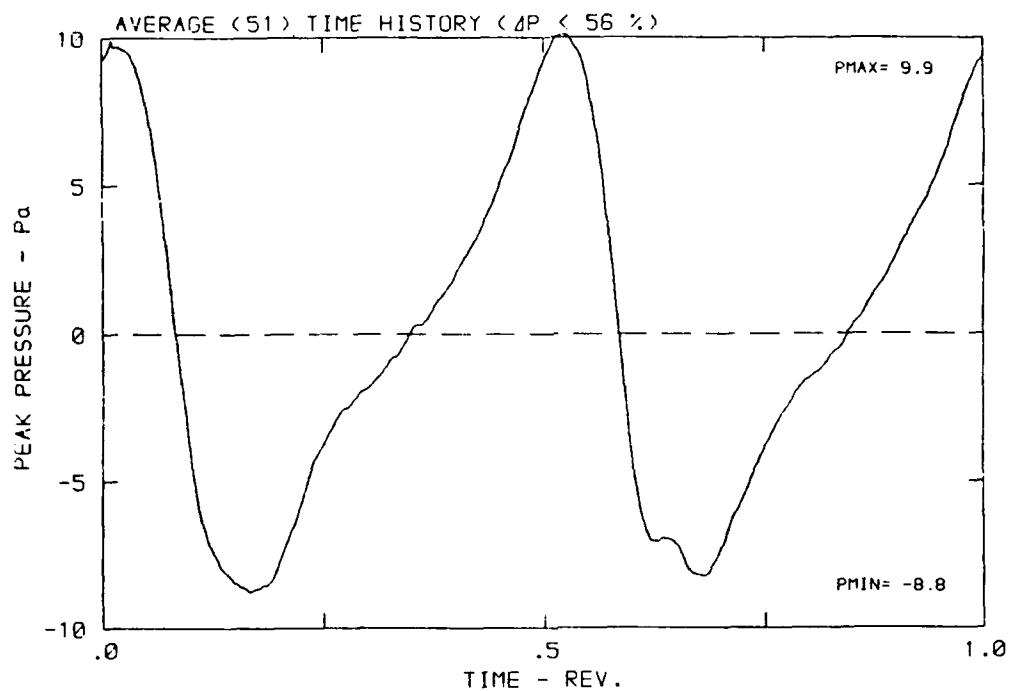
DATA POINT: FC-4 RUN: 124 MP: 6

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



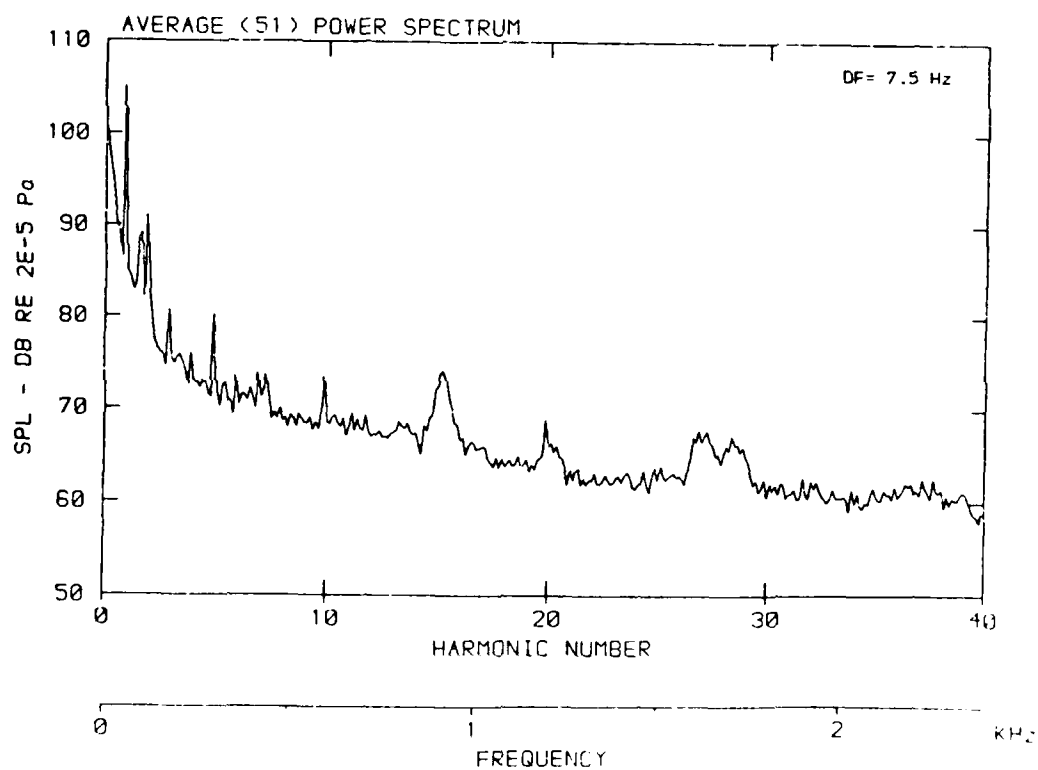
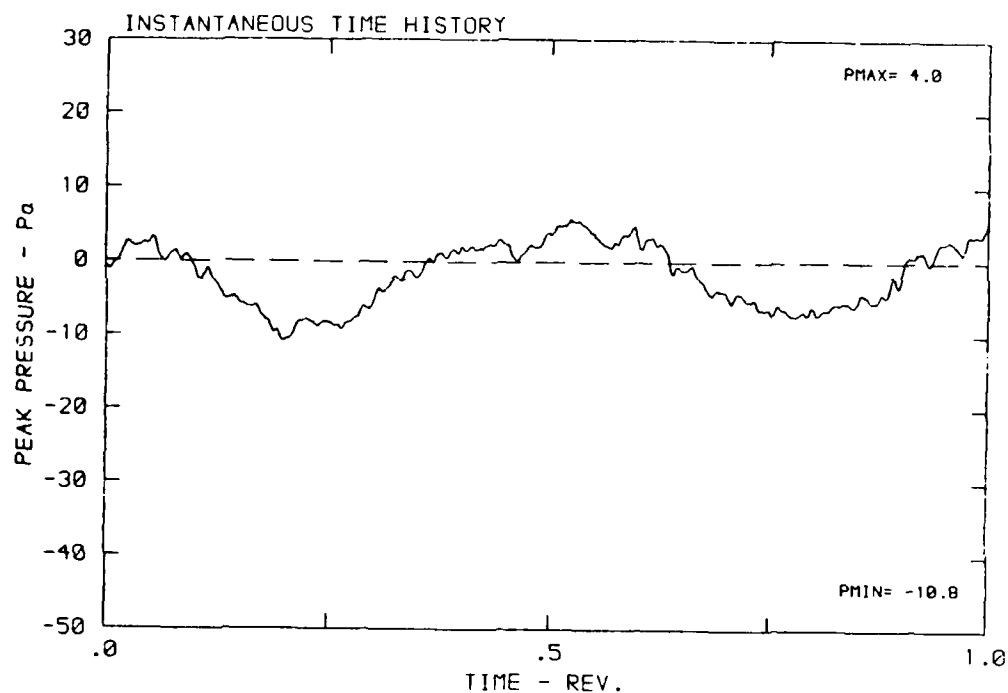
DATA POINT: FC-4 RUN: 124 MP: 6

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



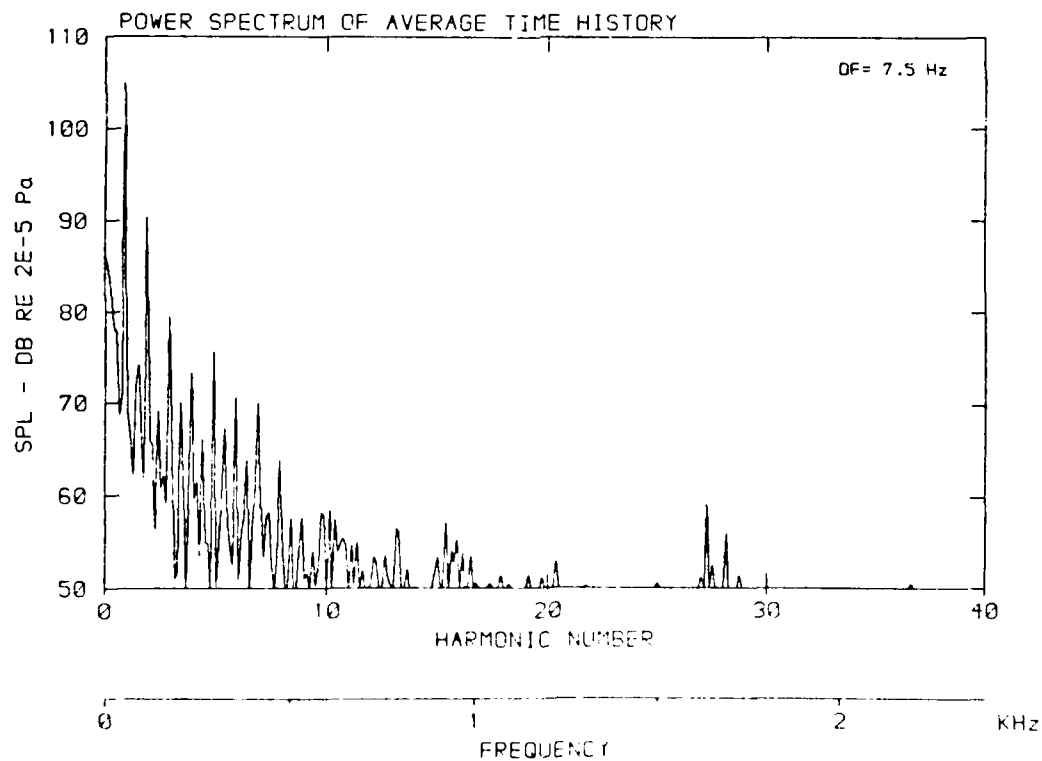
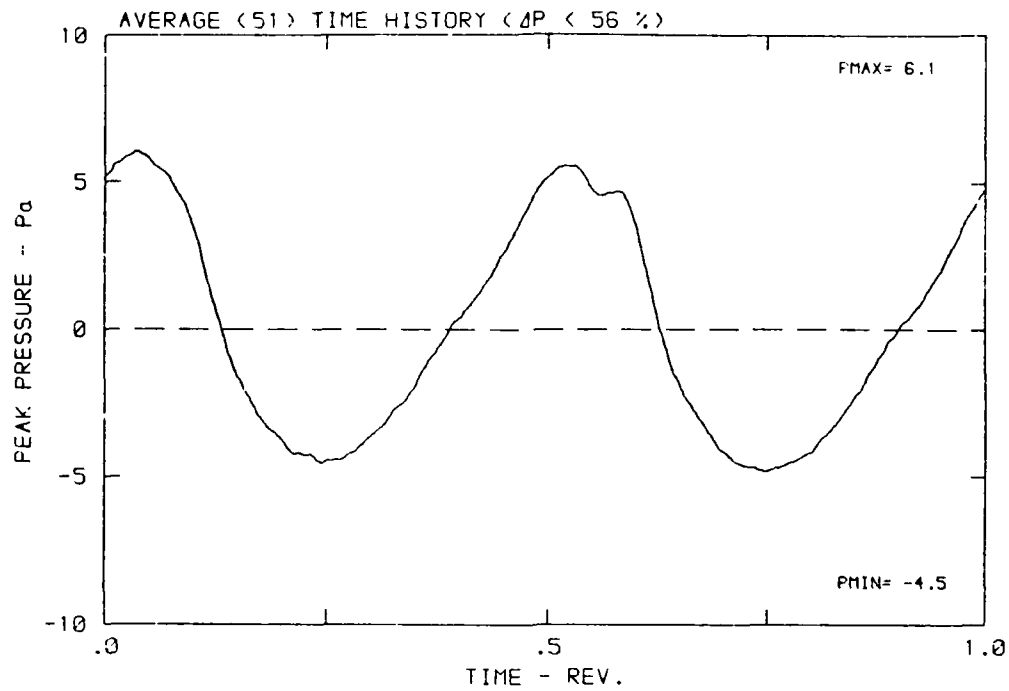
DATA POINT: FC-4 RUN: 124 MP: 7

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 289.0 K



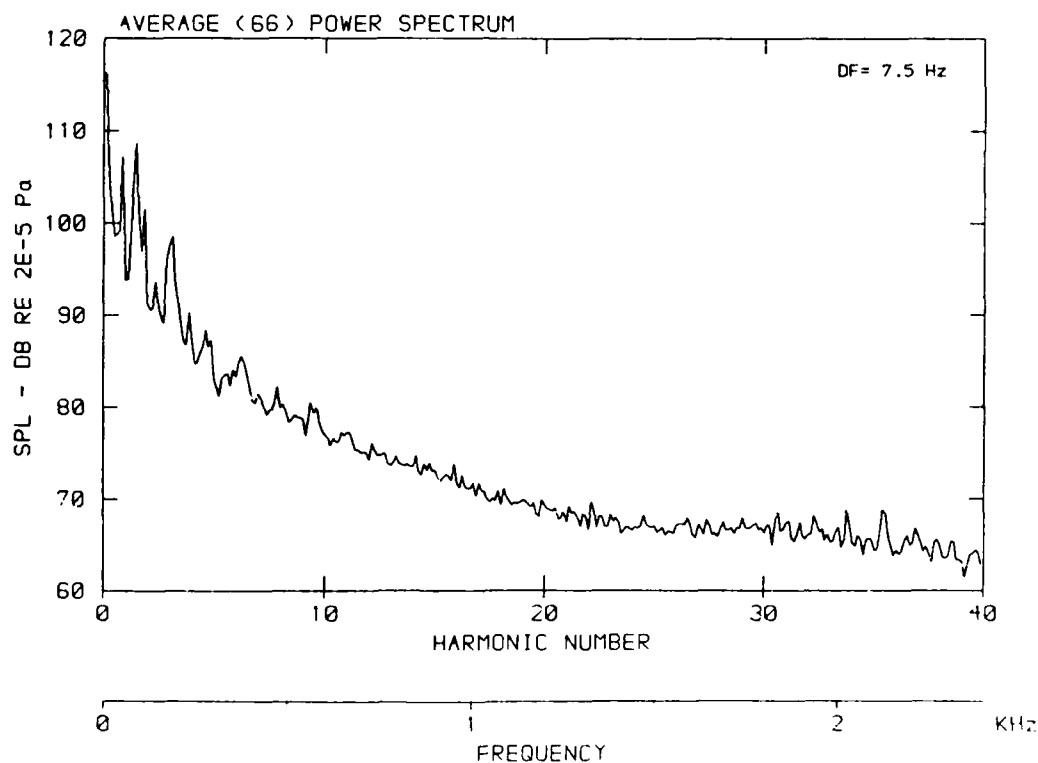
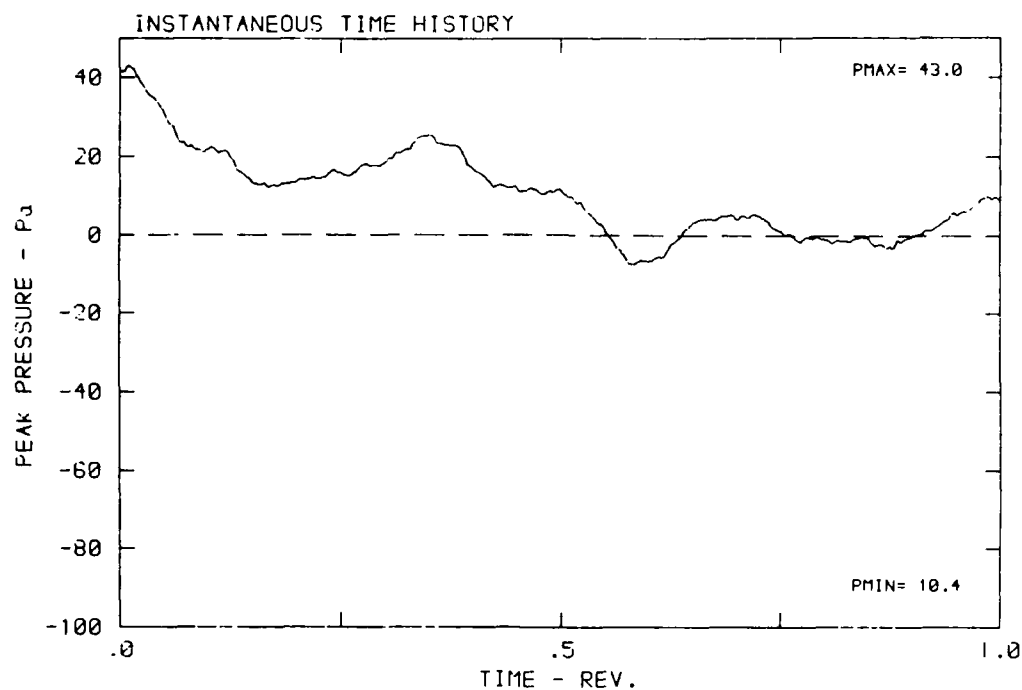
DATA POINT: FC-4 RUN: 124 MP: 7

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



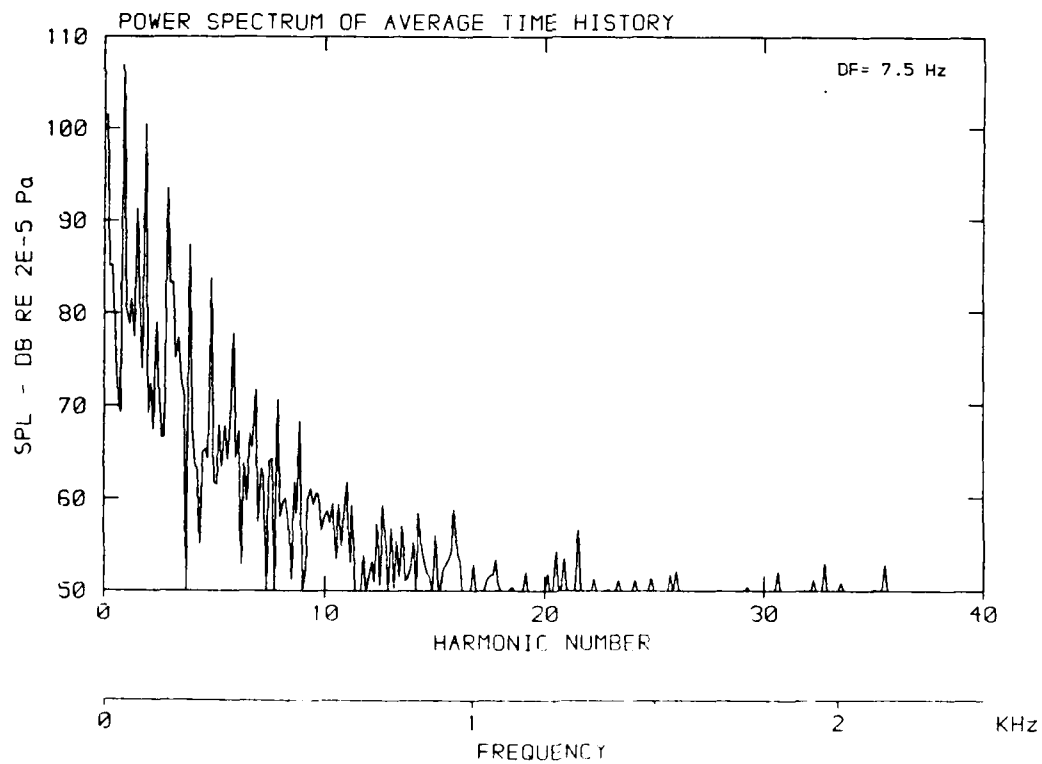
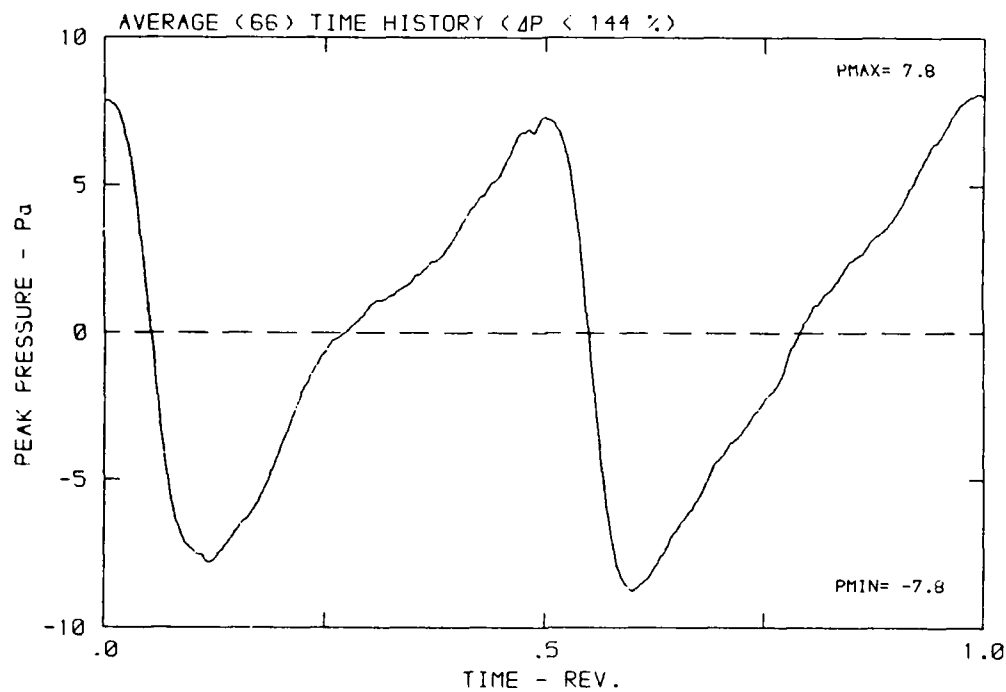
DATA POINT: FC-4 RUN: 124 MP: 8

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



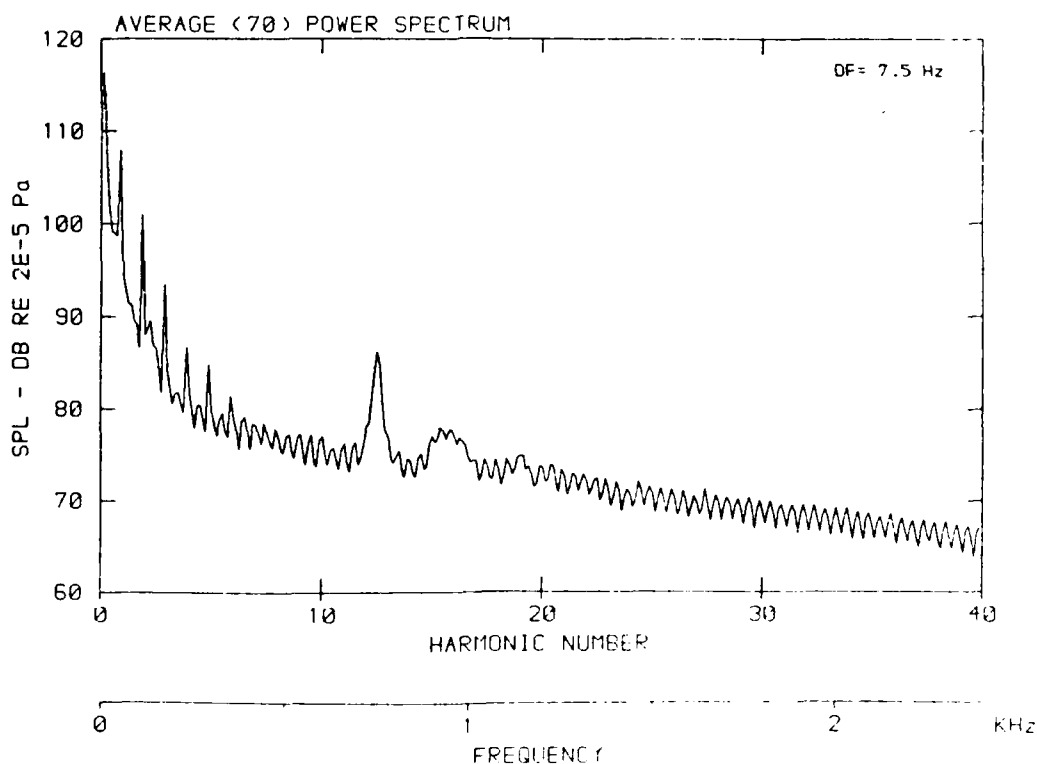
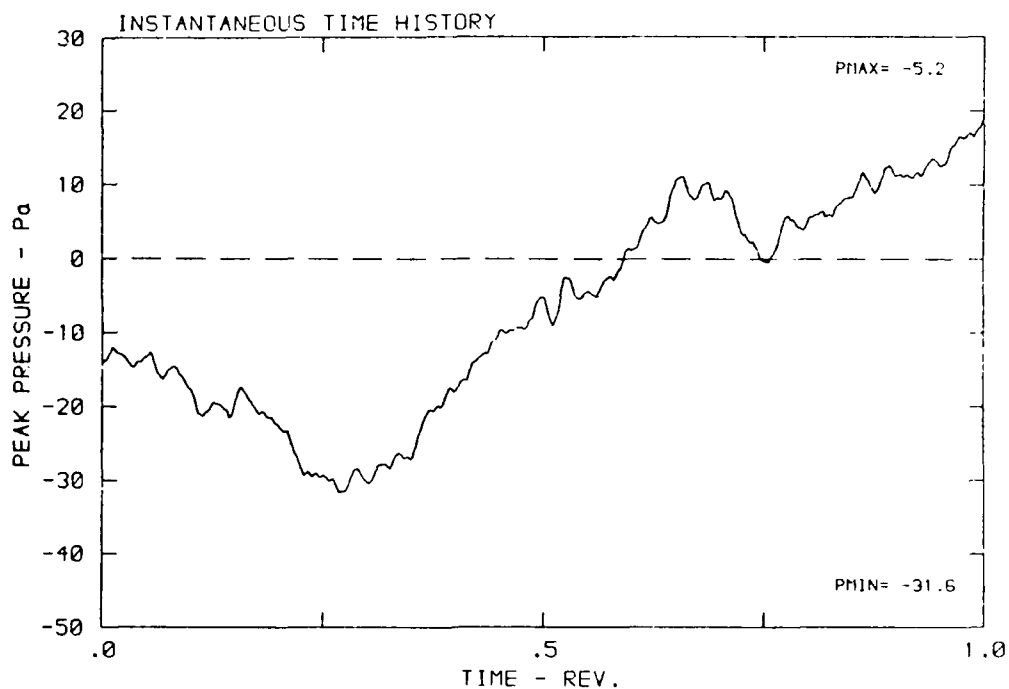
DATA POINT: FC-4 RUN: 124 MP: 8

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



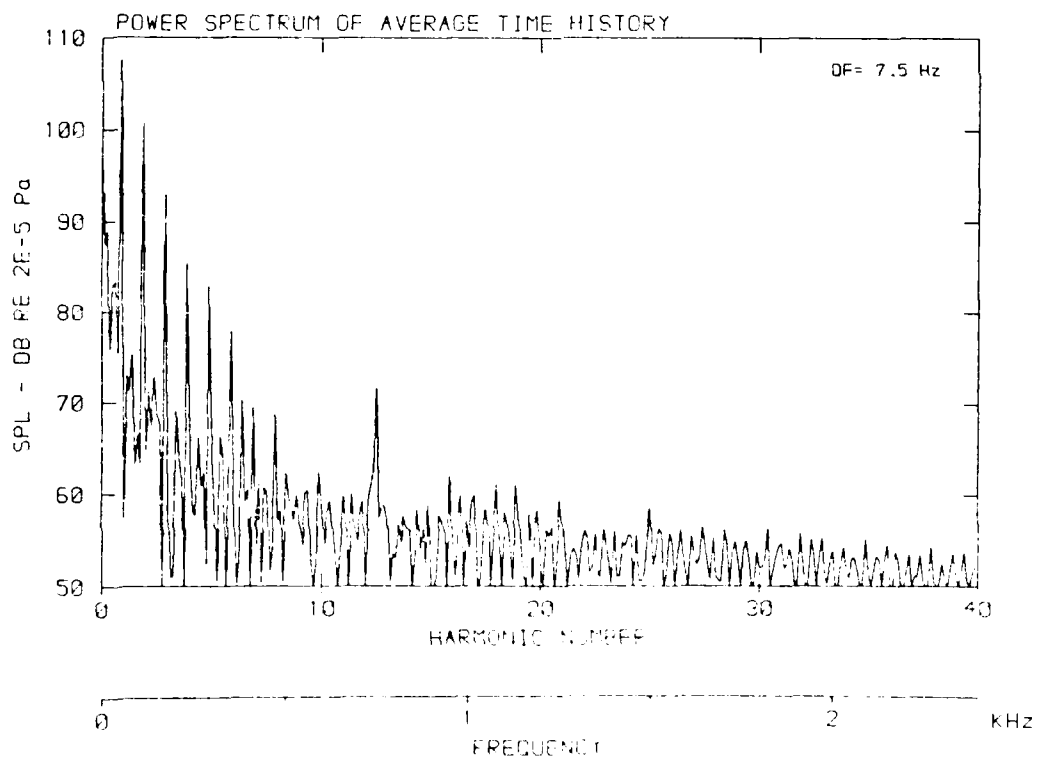
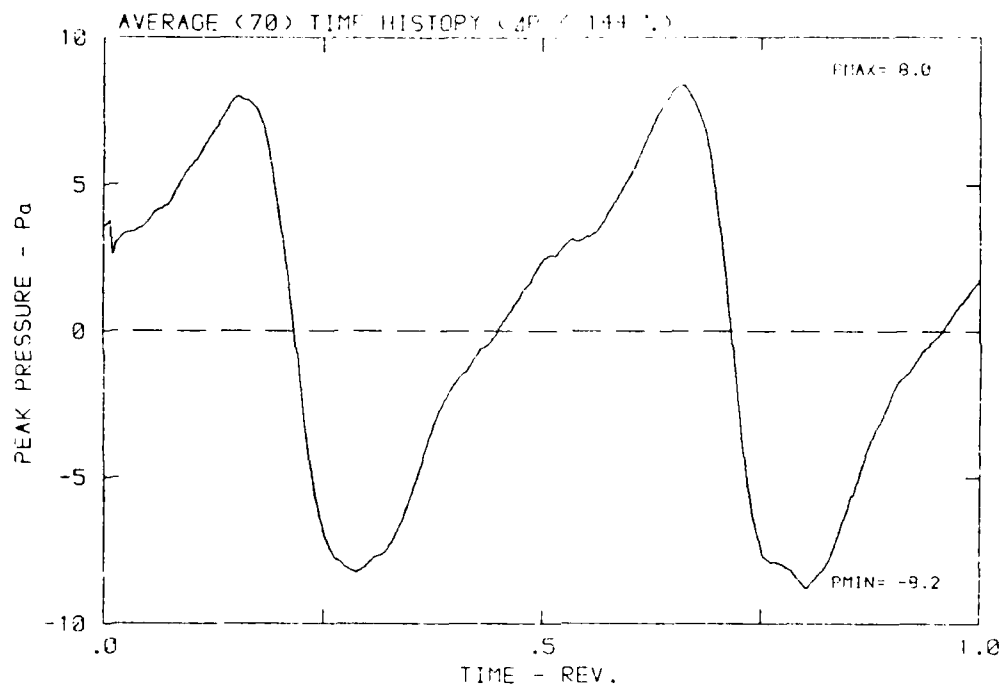
DATA POINT: FC-4 RUN: 124 MP: 9

β : 24.4° MH: .5829 n: 1800 rpm v/u: .269 ϕ : 3.6° T: 288.0 K



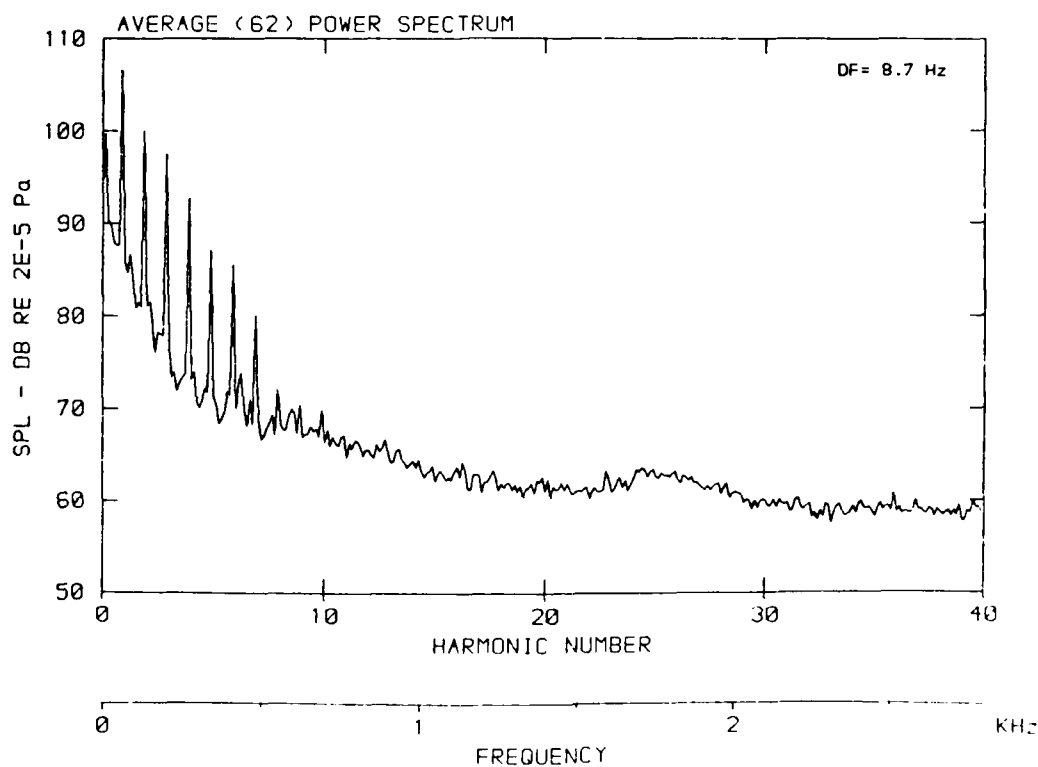
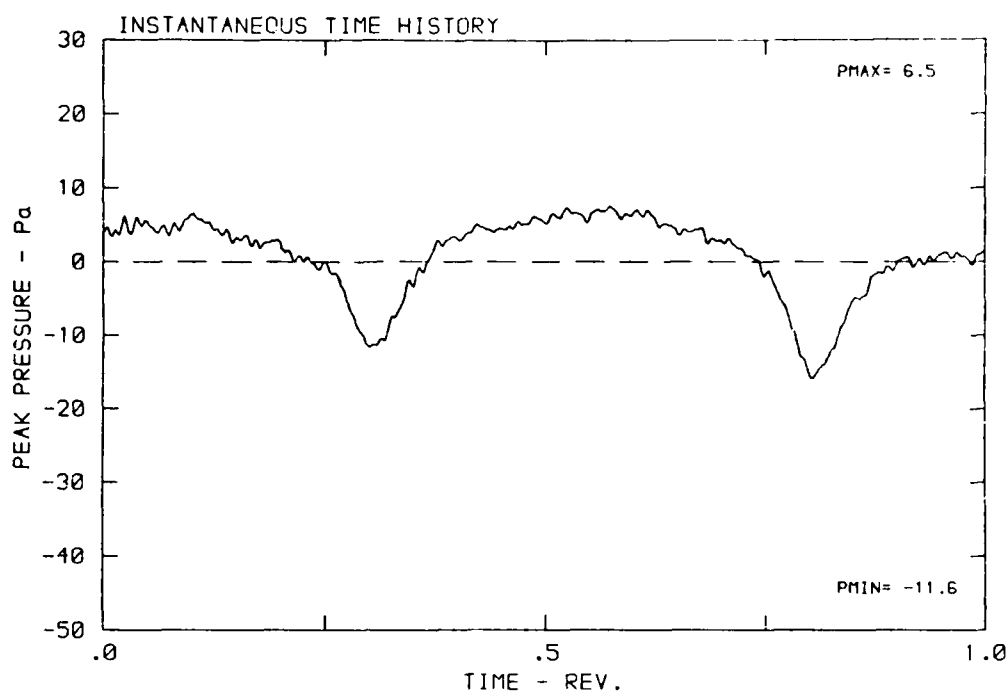
DATA POINT: FC-4 RUN: 124 MP: 9

β : 24.4° MH: .5829 n: 1800 rpm v/u : .269 ϕ : 3.6° T: 288.0 K



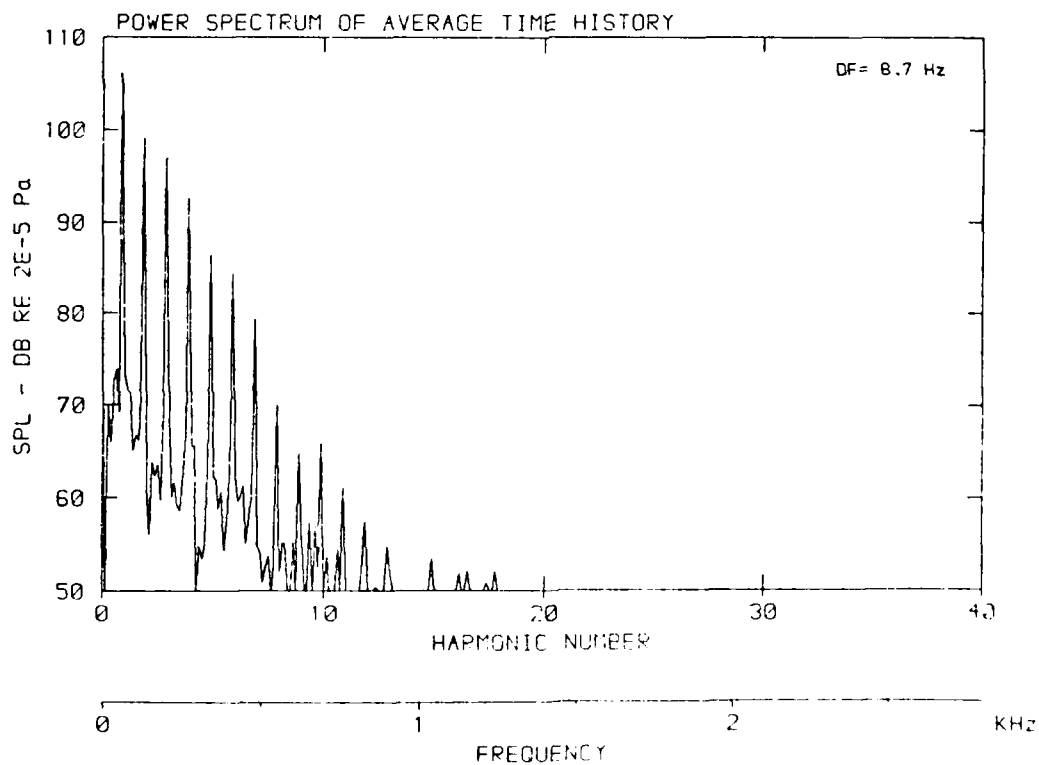
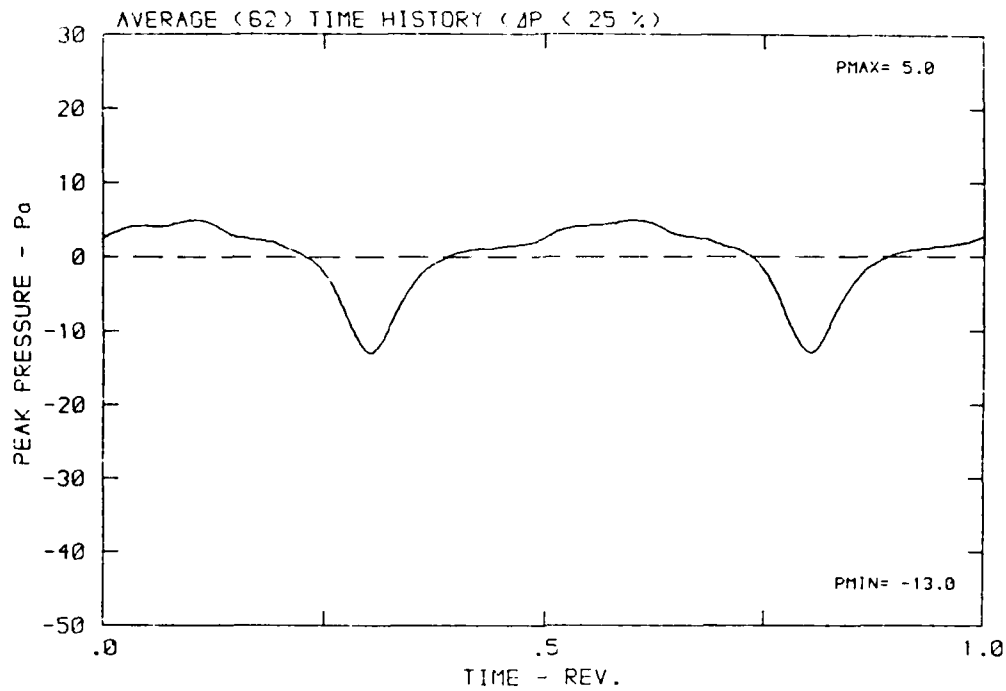
DATA POINT: FC-5 RUN: 125 MP: 1

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



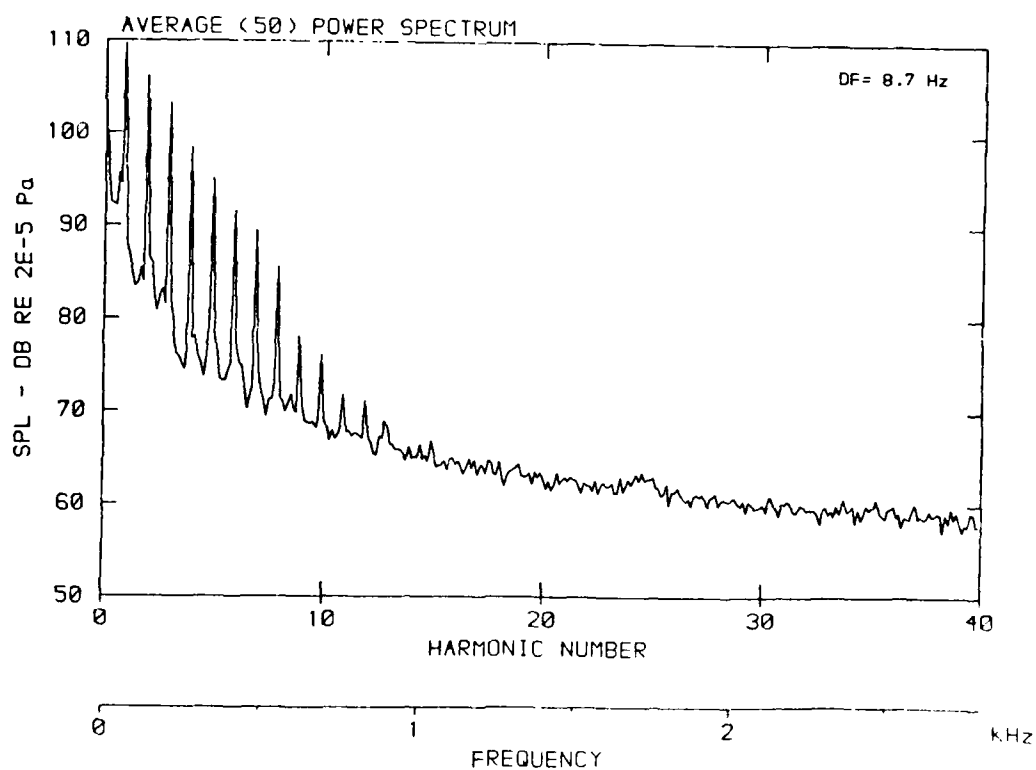
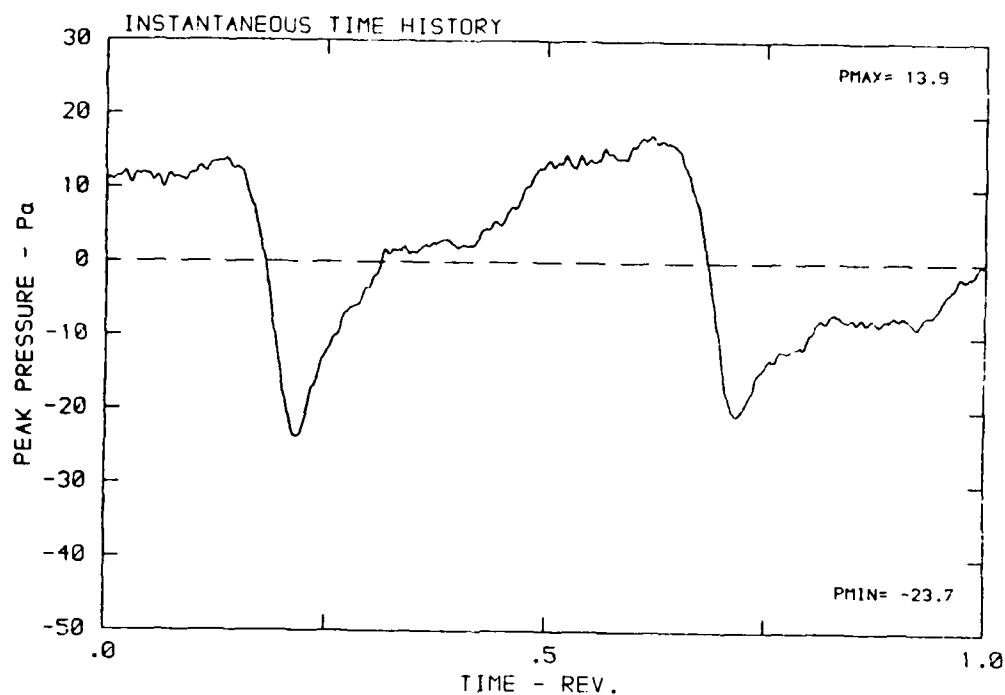
DATA POINT: FC-5 RUN: 125 MP: 1

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



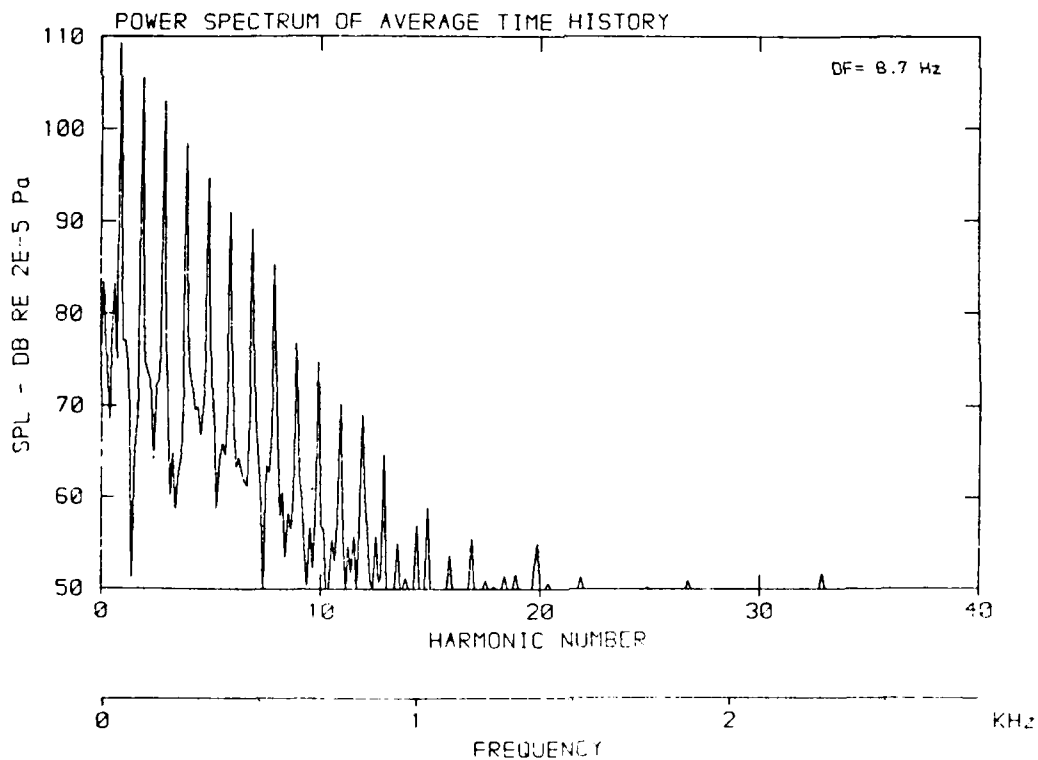
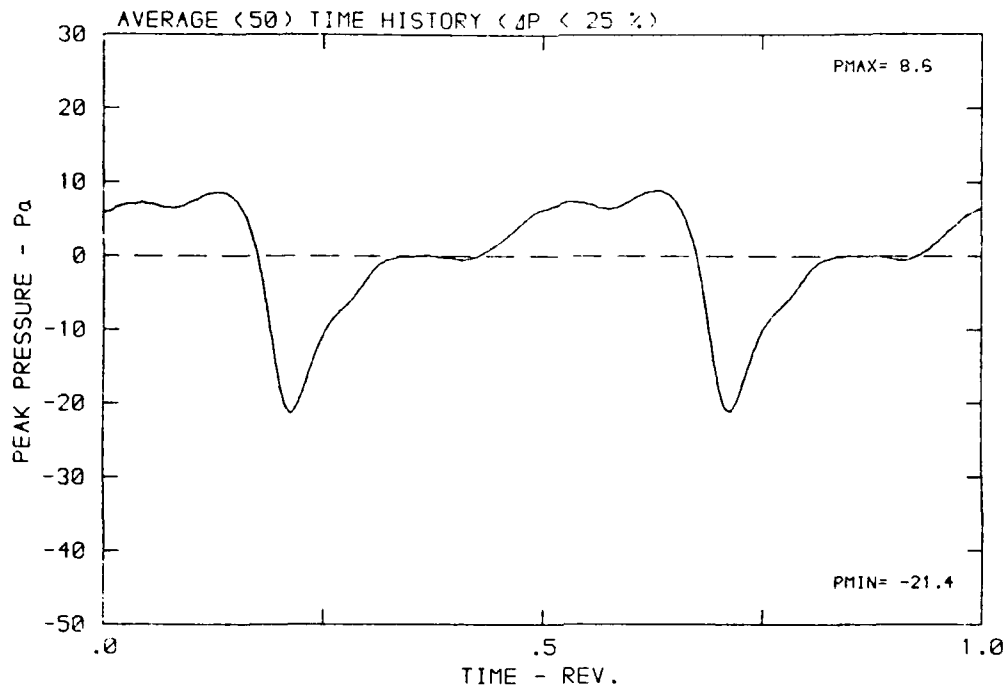
DATA POINT: FC-5 RUN: 125 MP: 2

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



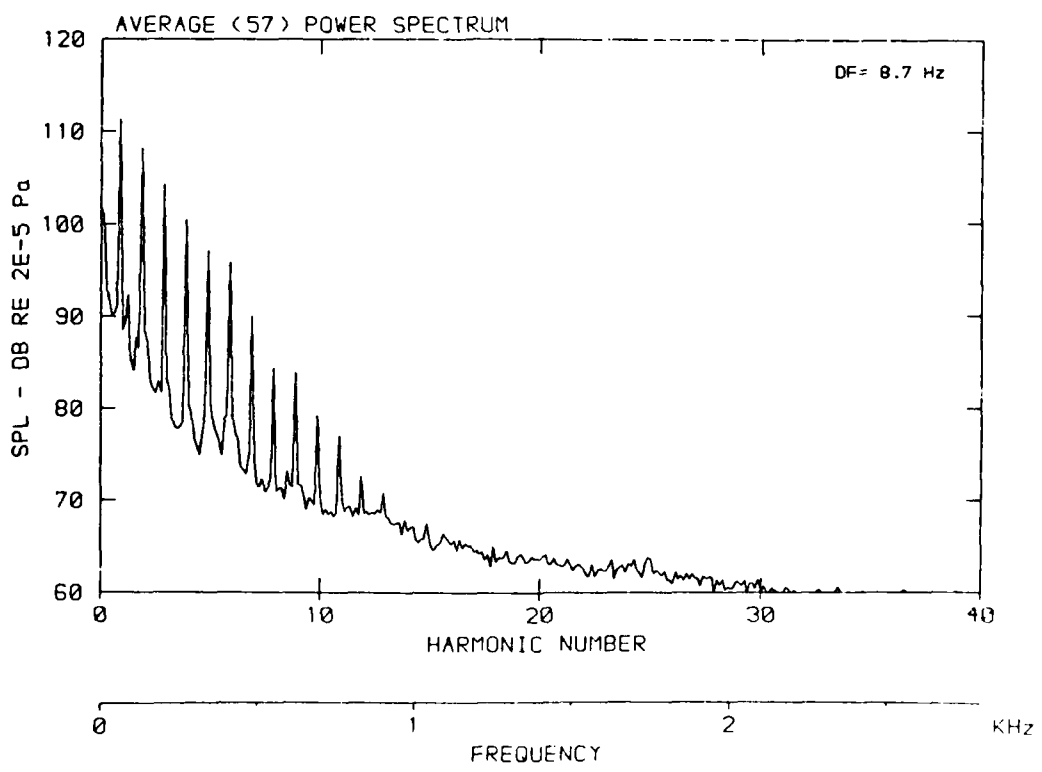
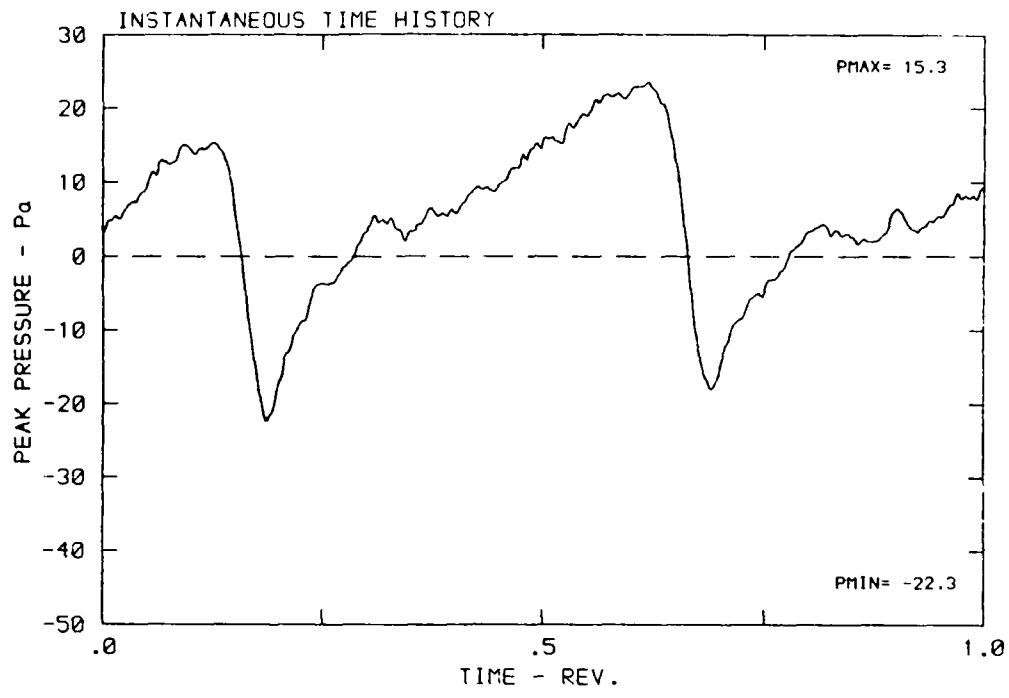
DATA POINT: FC-5 RUN: 125 MP: 2

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



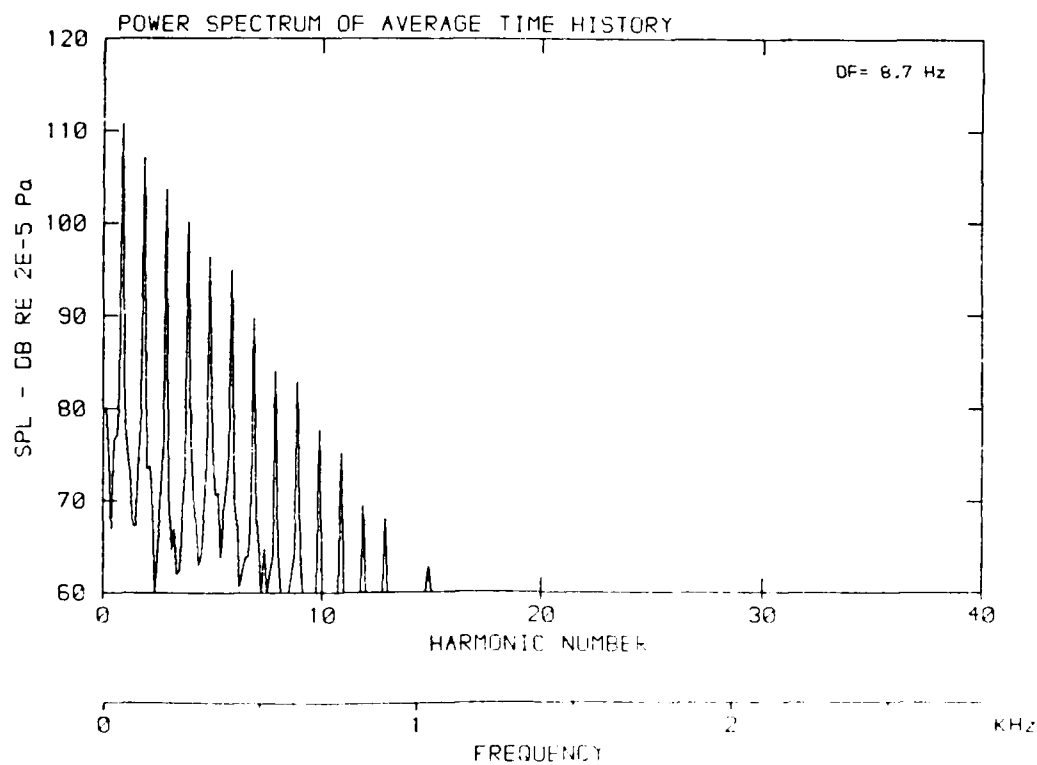
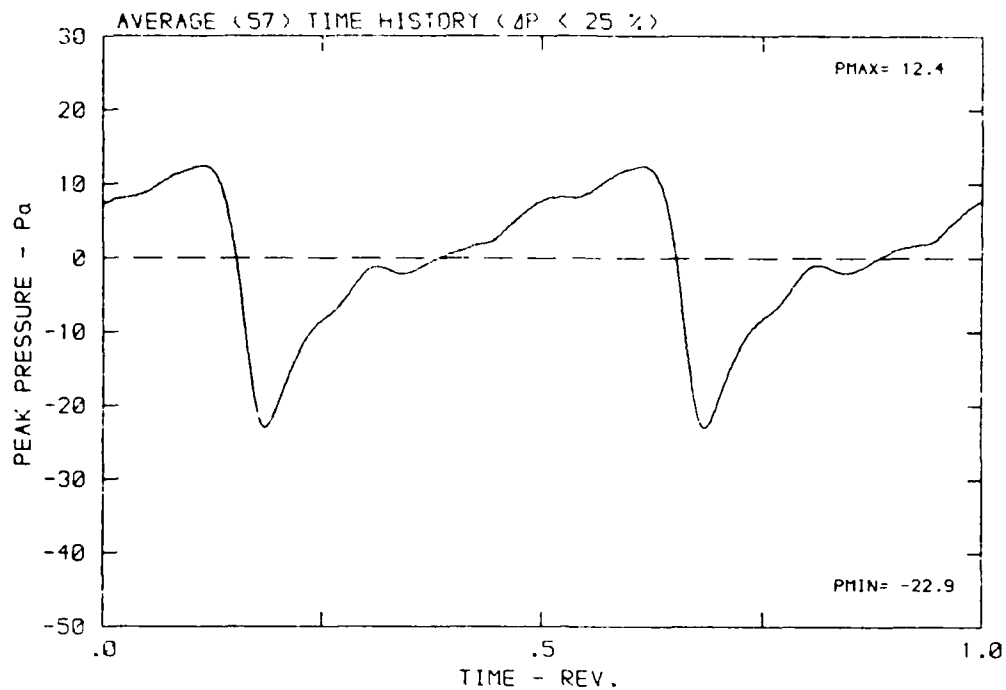
DATA POINT: FC-5 RUN: 125 MP: 3

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



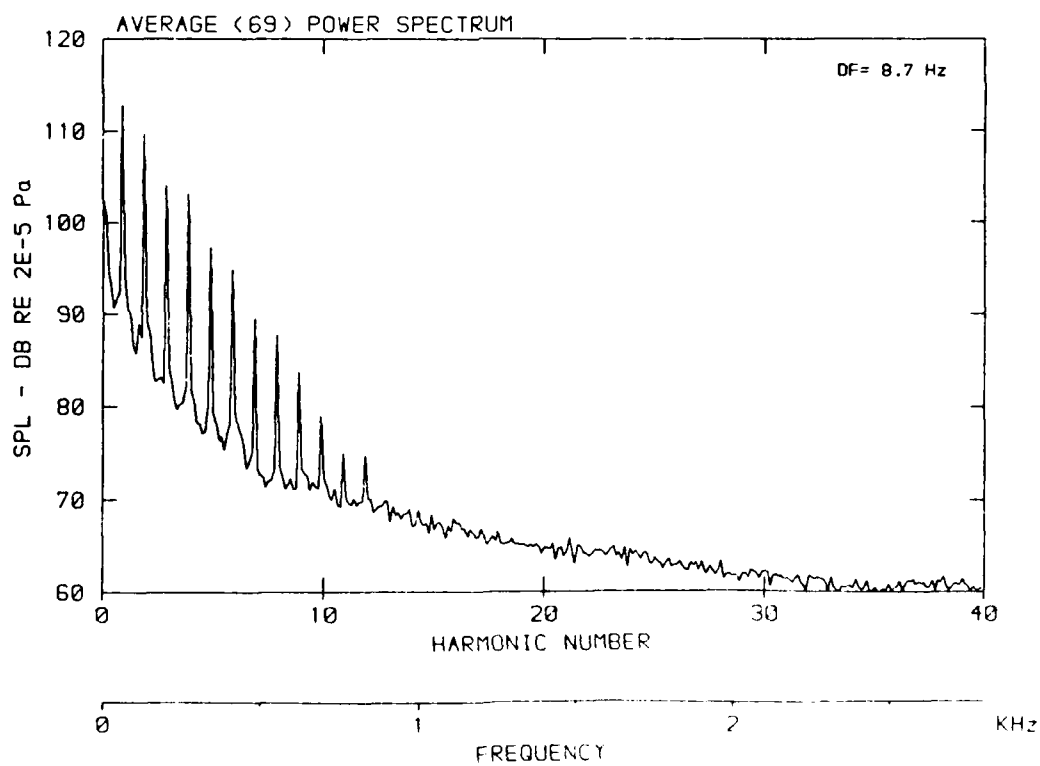
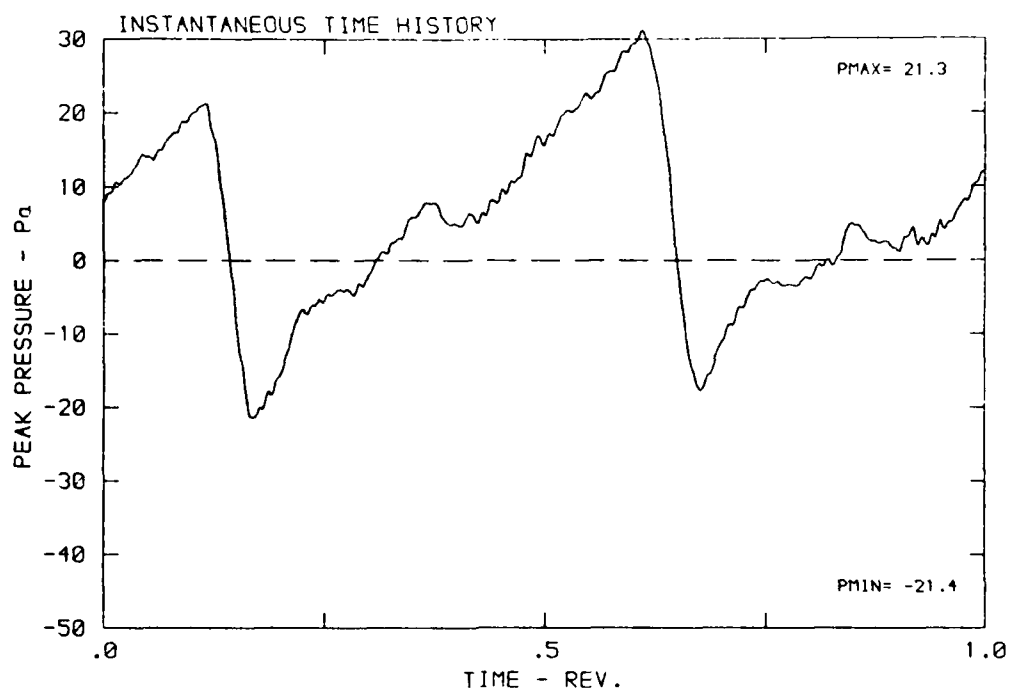
DATA POINT: FC-5 RUN: 125 MP: 3

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



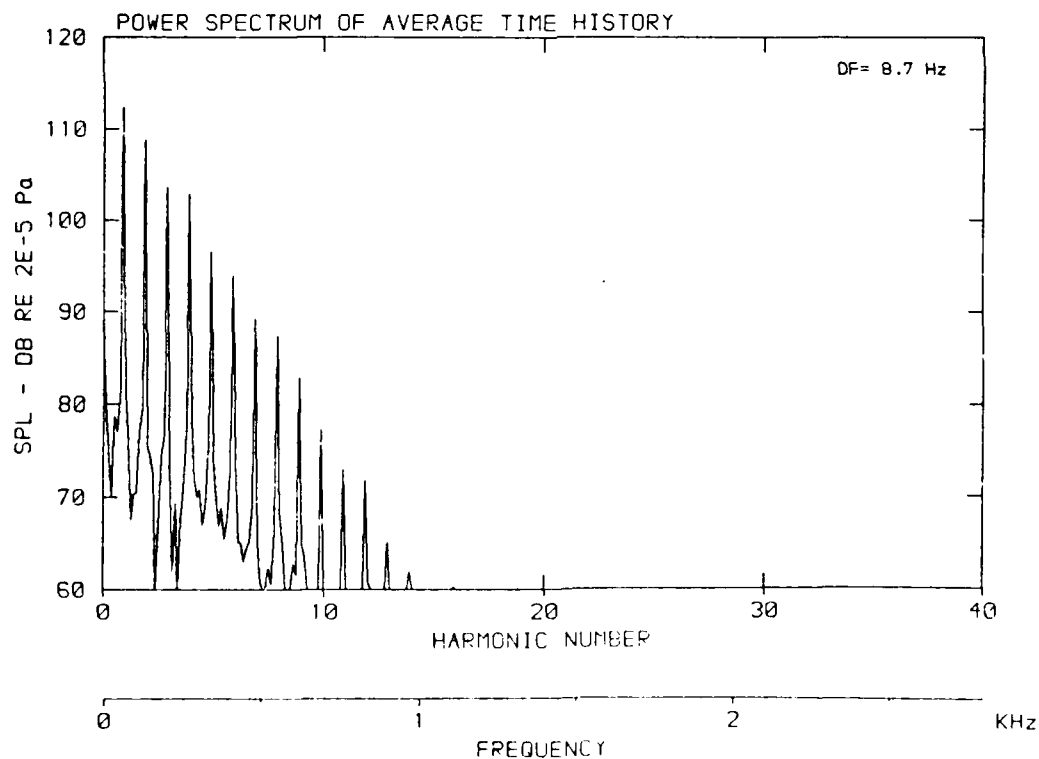
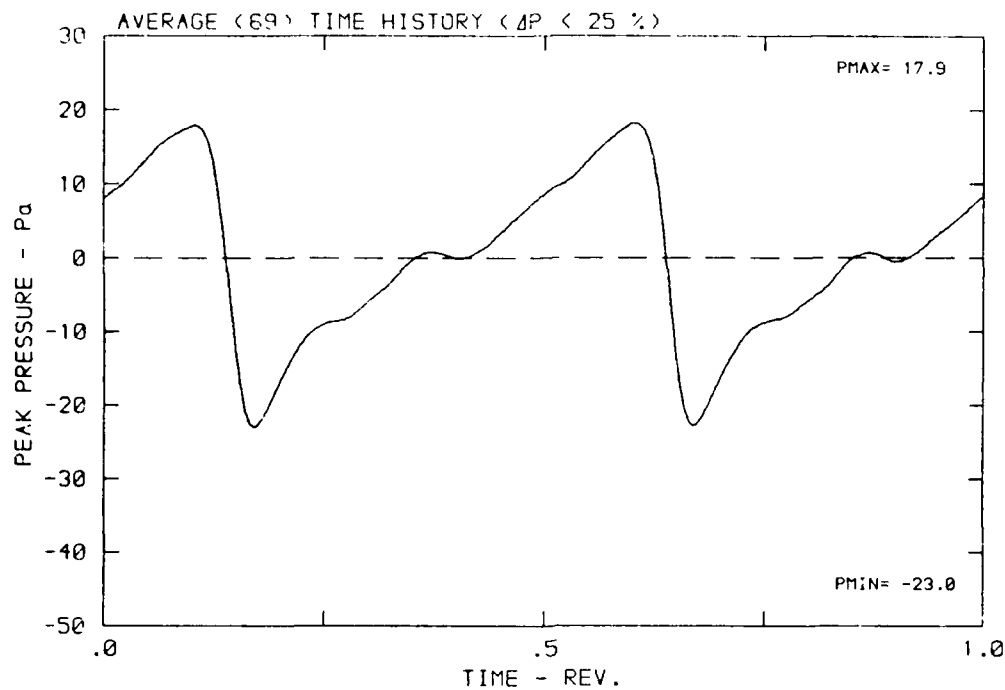
DATA POINT: FC-5 RUN: 125 MP: 4

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



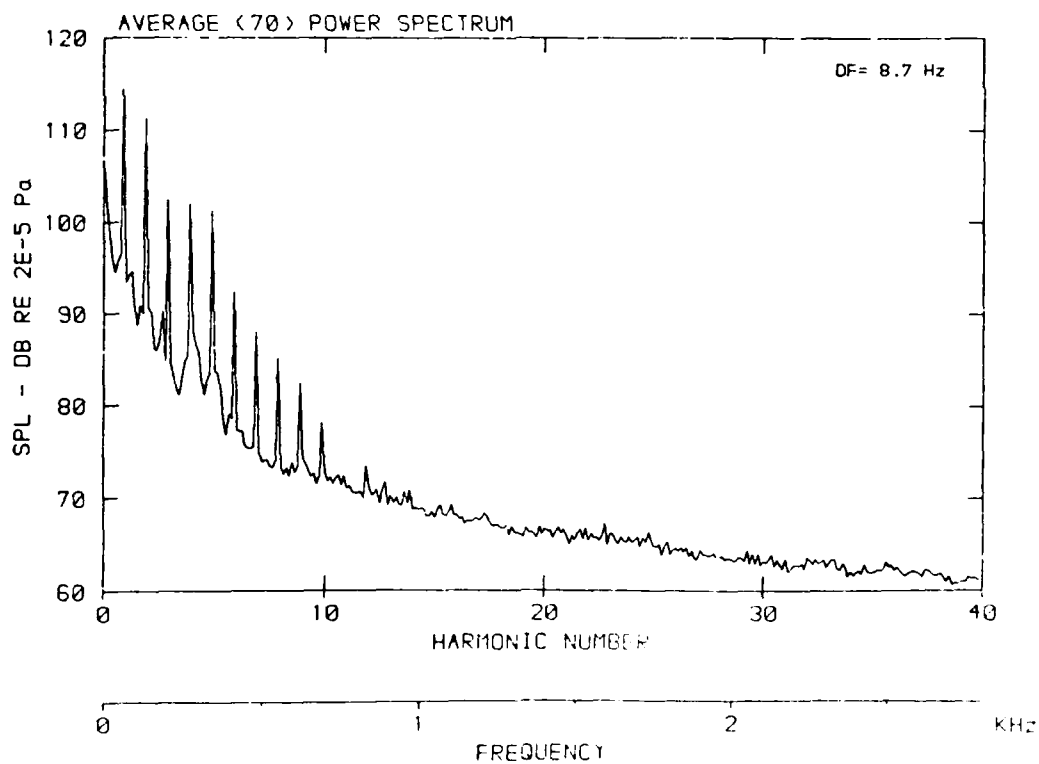
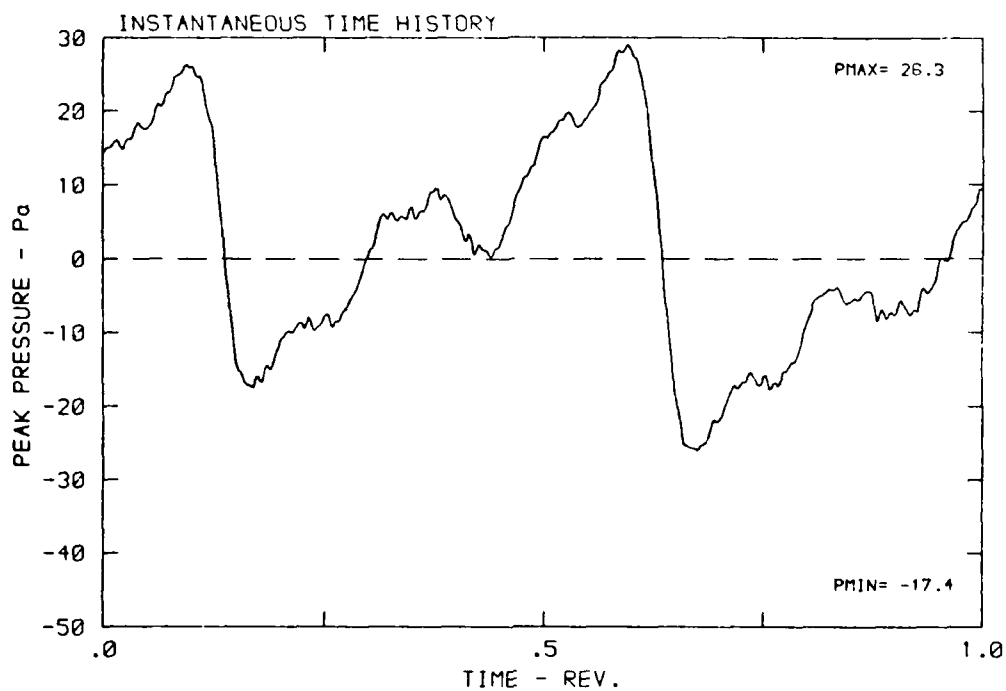
DATA POINT: FC-5 RUN: 125 MP: 4

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



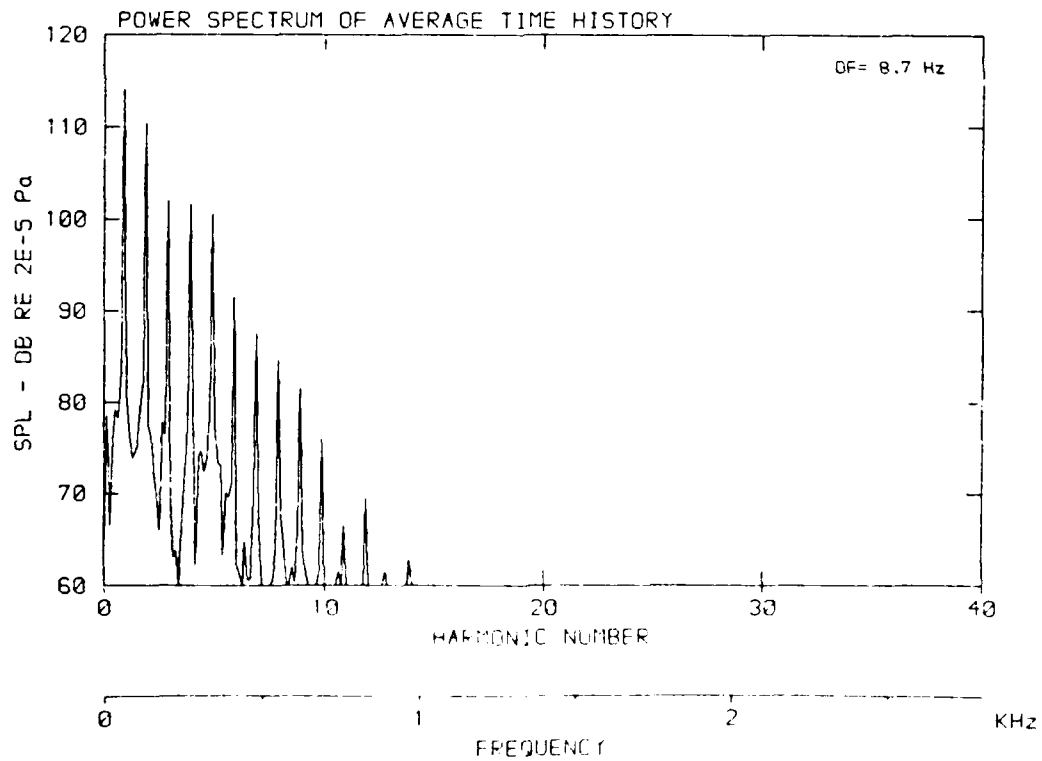
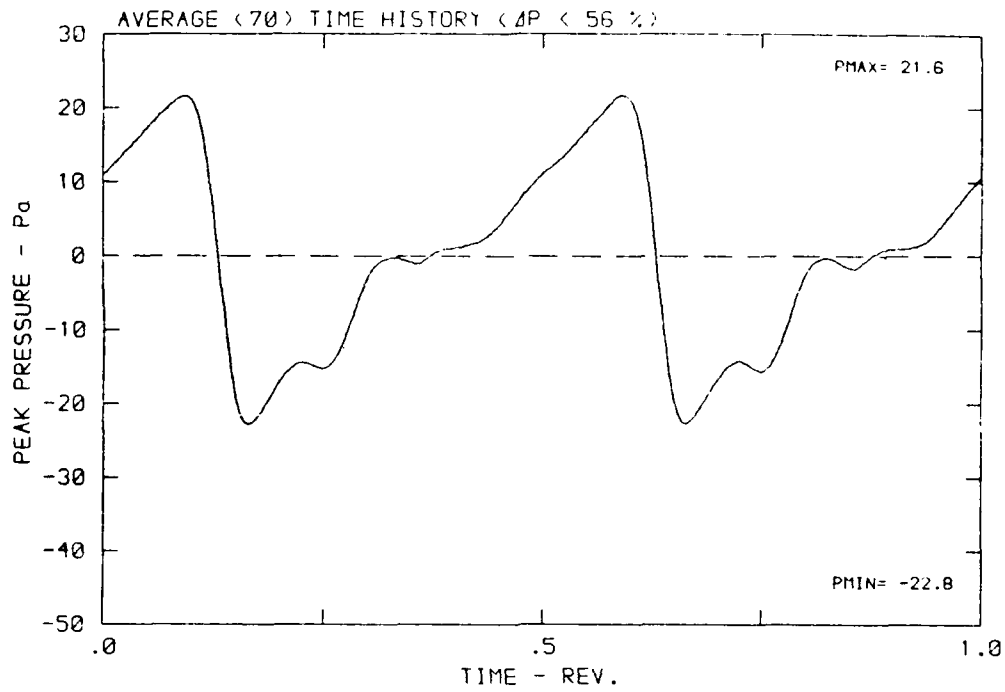
DATA POINT: FC-5 RUN: 125 MP: 5

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 283.0 K



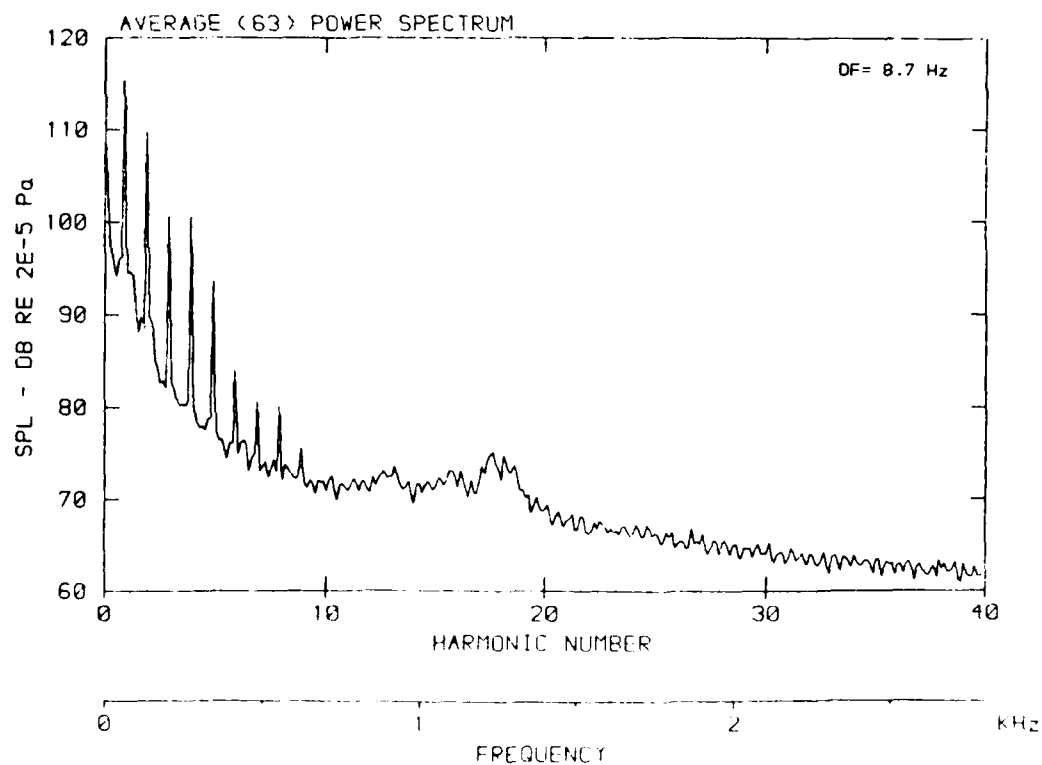
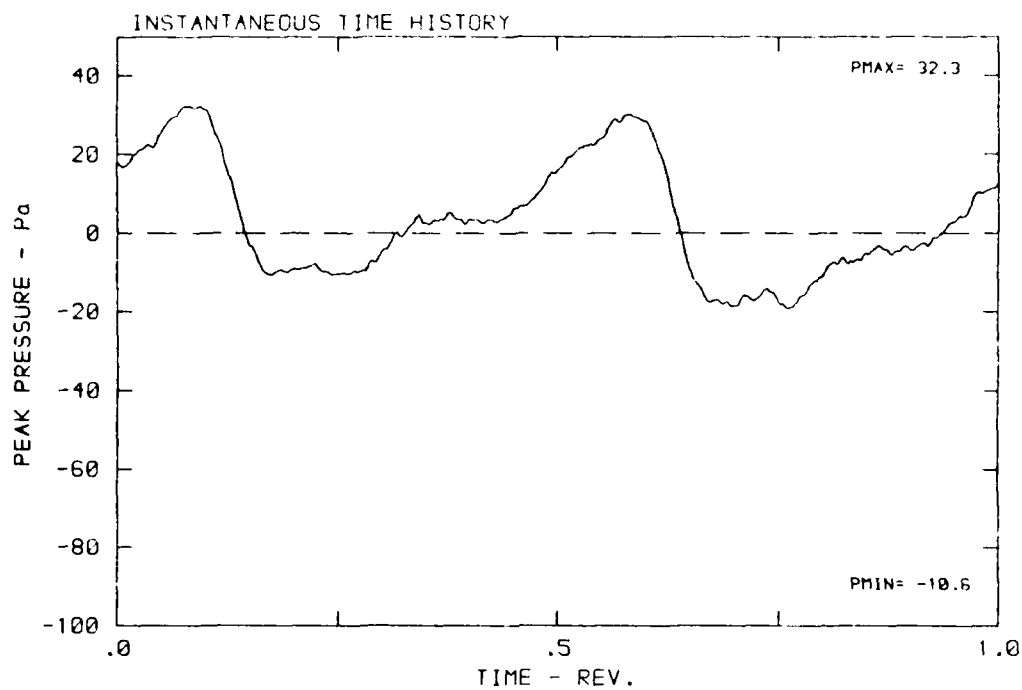
DATA POINT: FC-5 RUN: 125 MP: 5

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



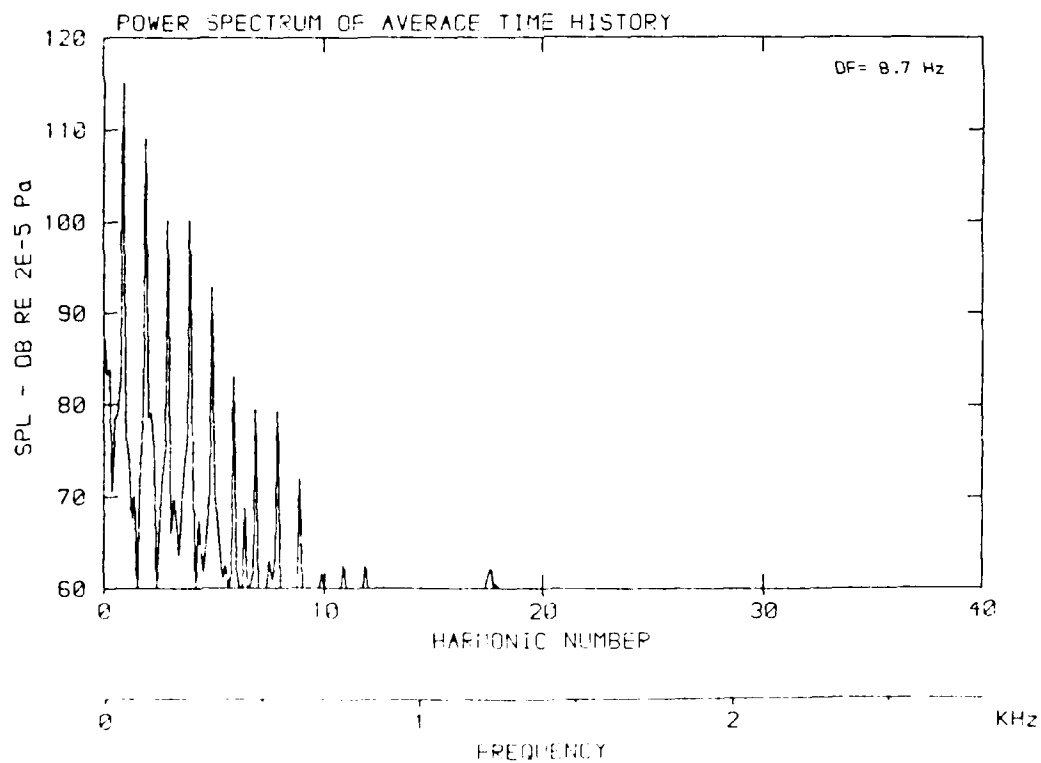
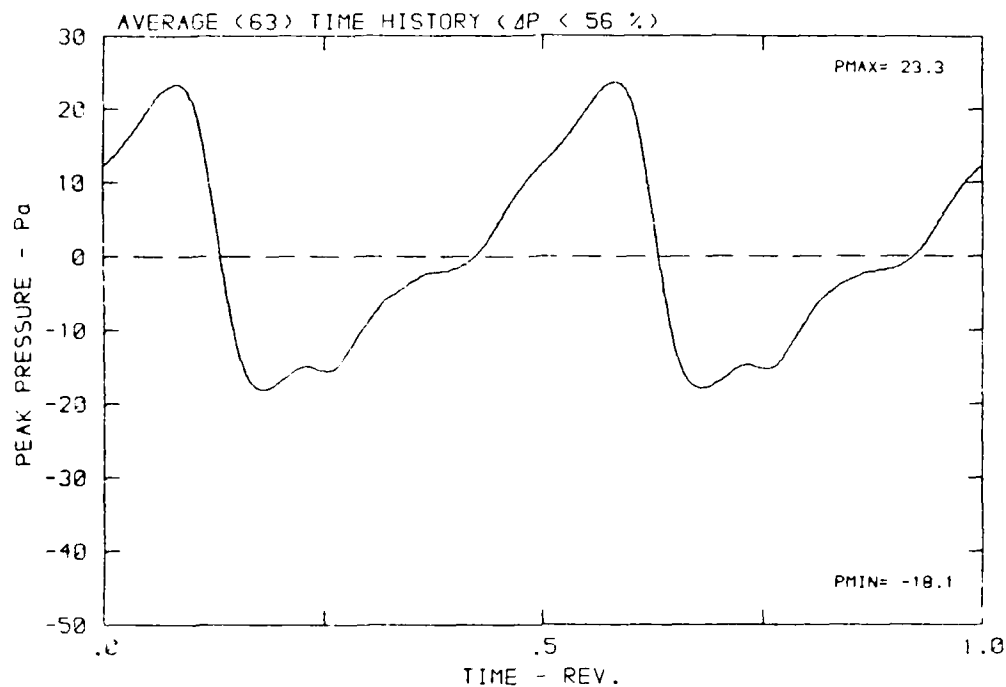
DATA POINT: FC-5 RUN: 125 MP: 6

β : 24.4° MH: .6738 ρ : 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



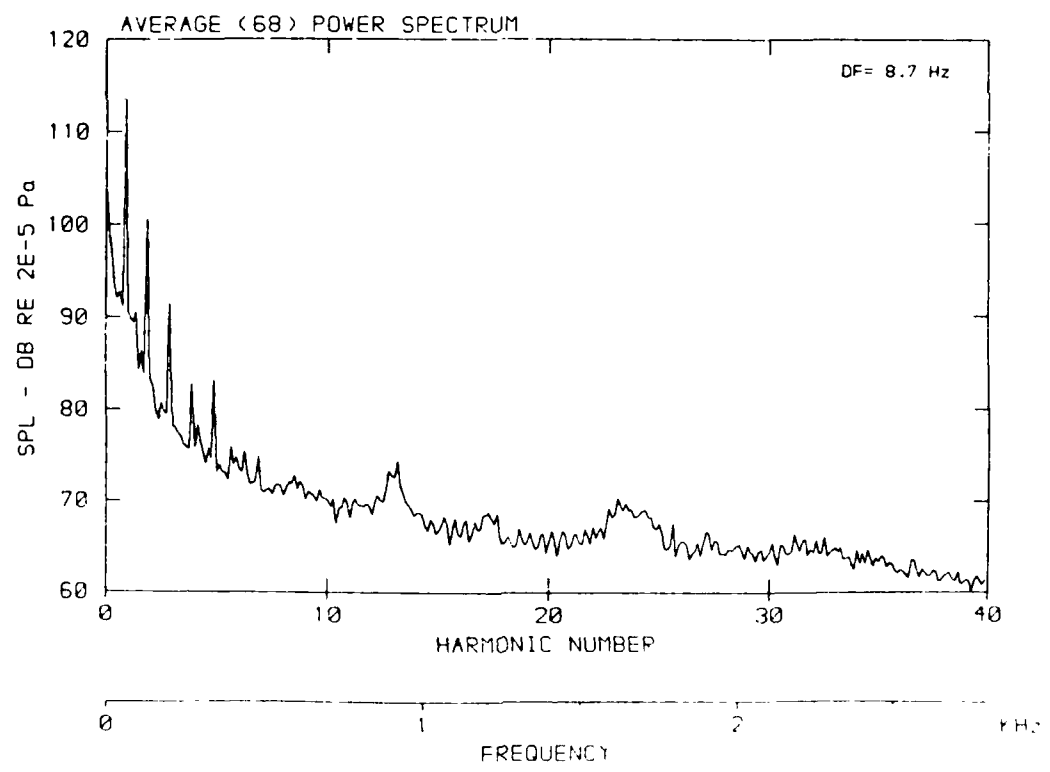
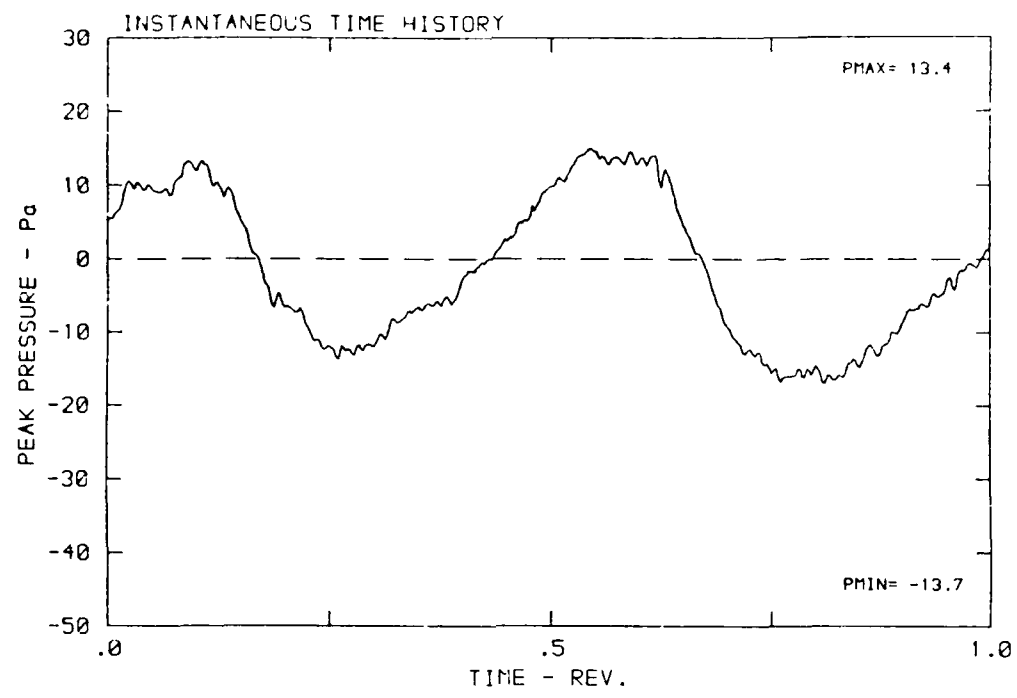
DATA POINT: FC-5 RUN: 125 MP: 6

β : 24.4° MH: .6736 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



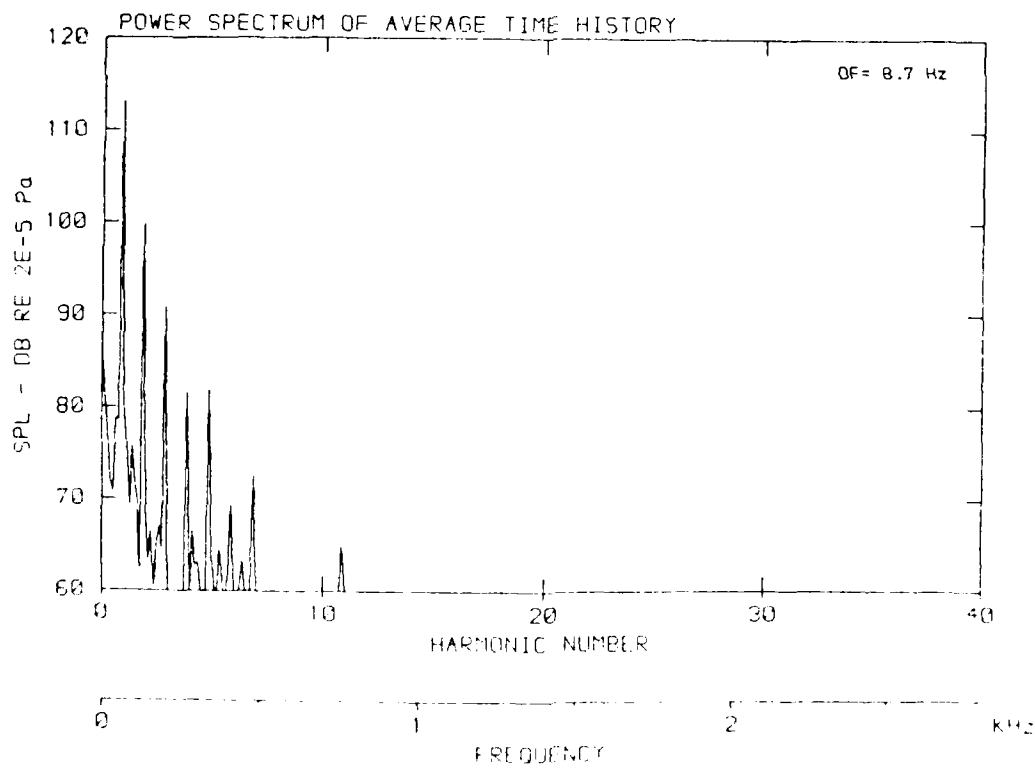
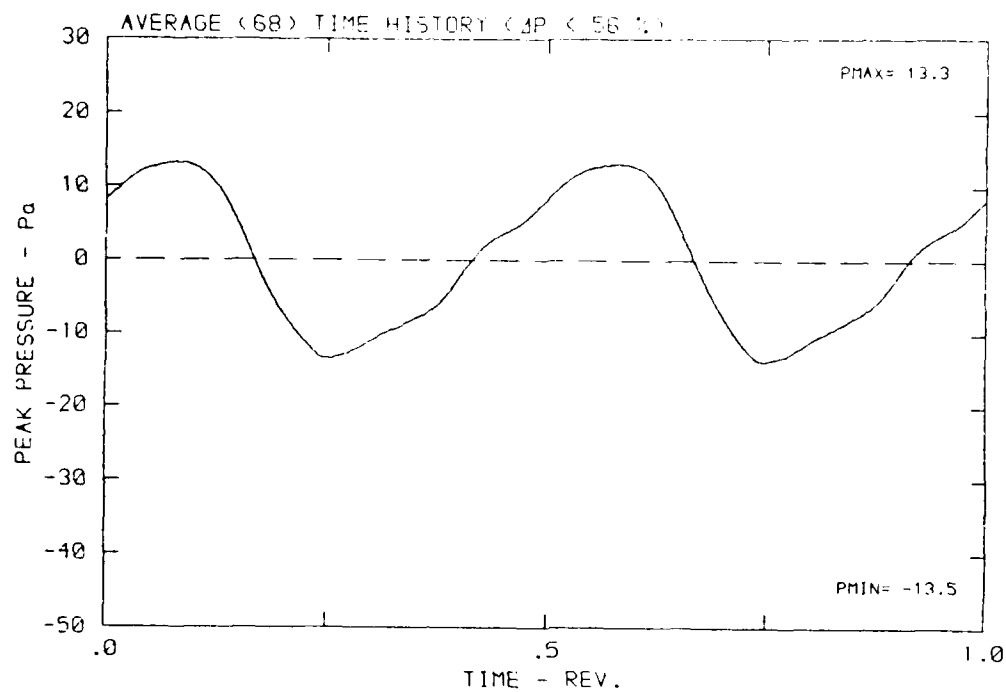
DATA POINT: FC-5 RUN: 125 MP: 7

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



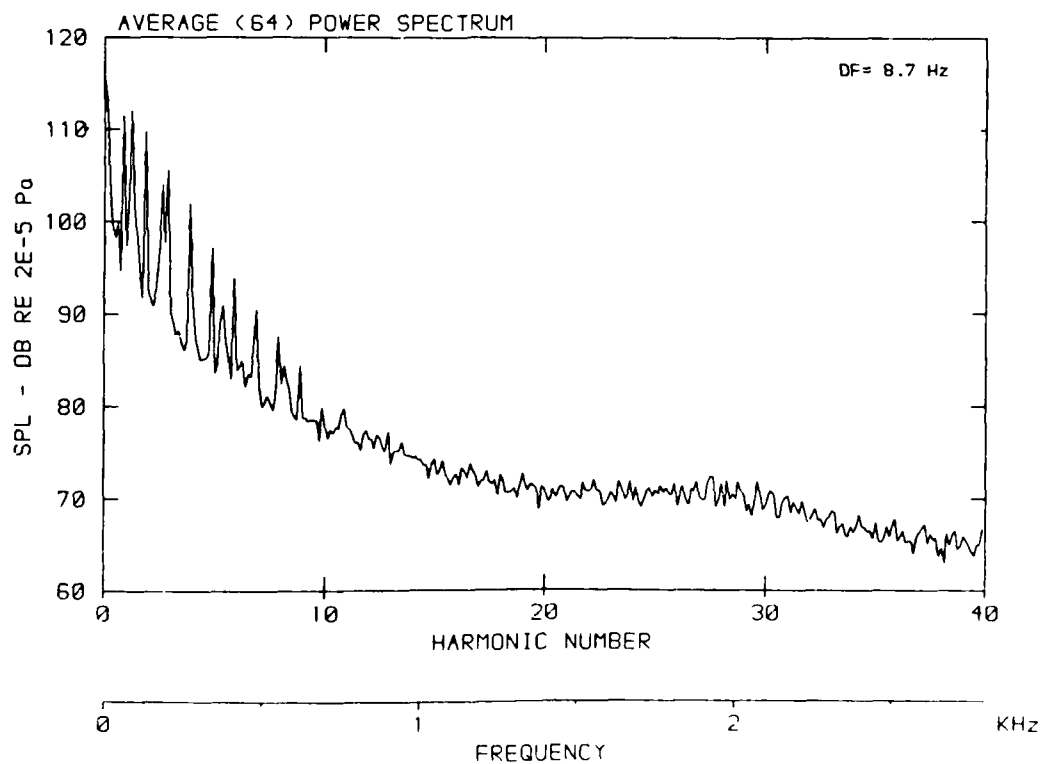
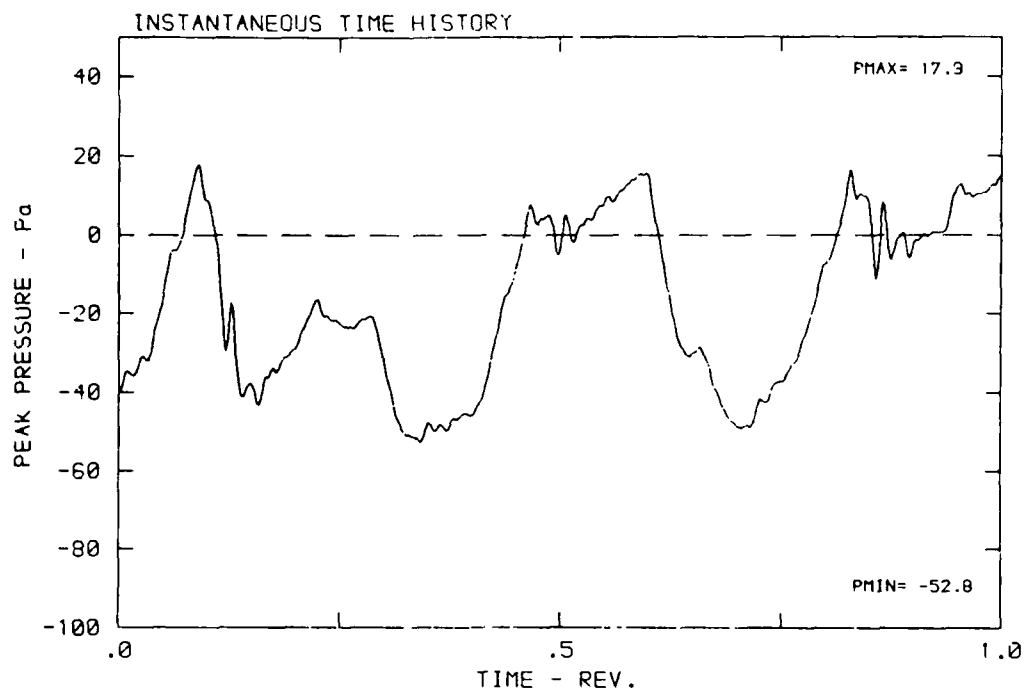
DATA POINT: FC-5 RUN: 125 MP: 7

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



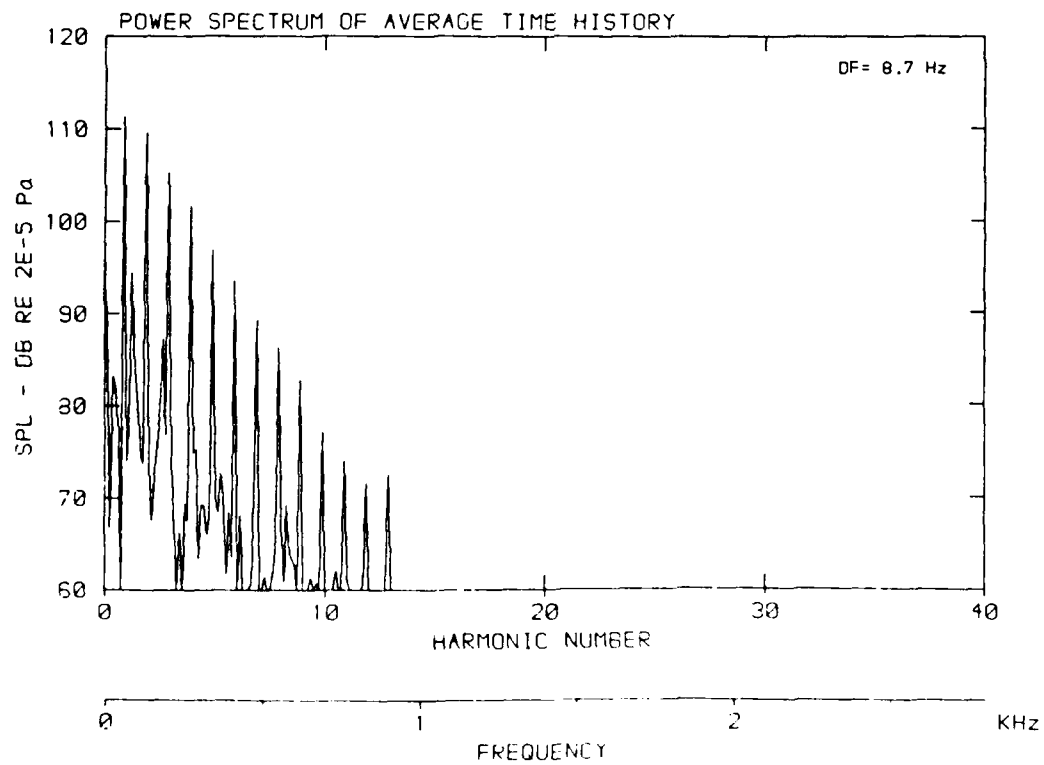
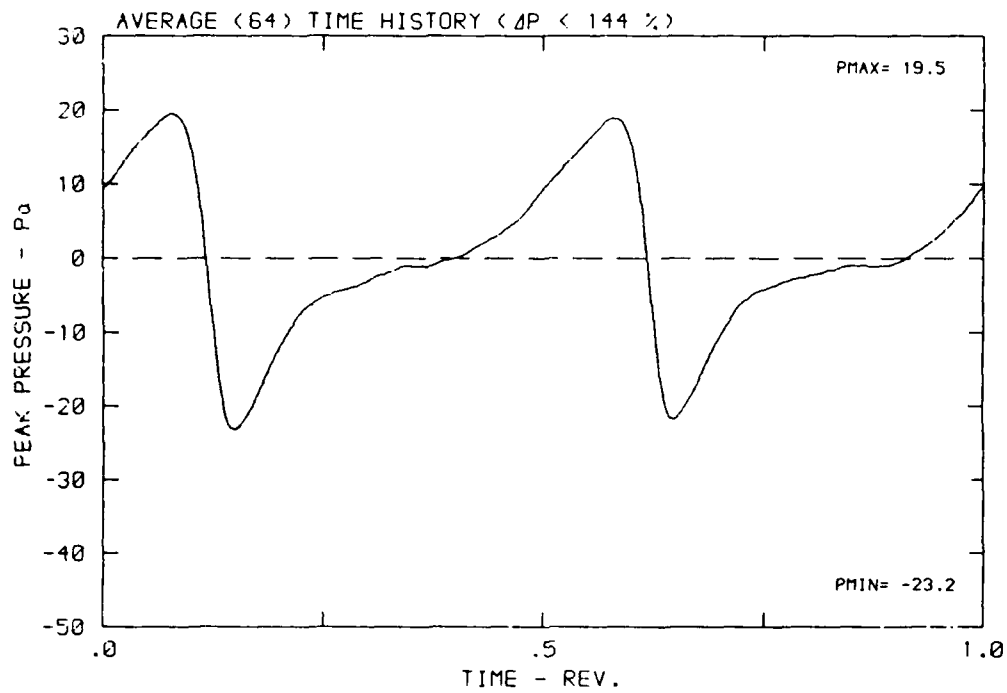
DATA POINT: FC-5 RUN: 125 MP: 8

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



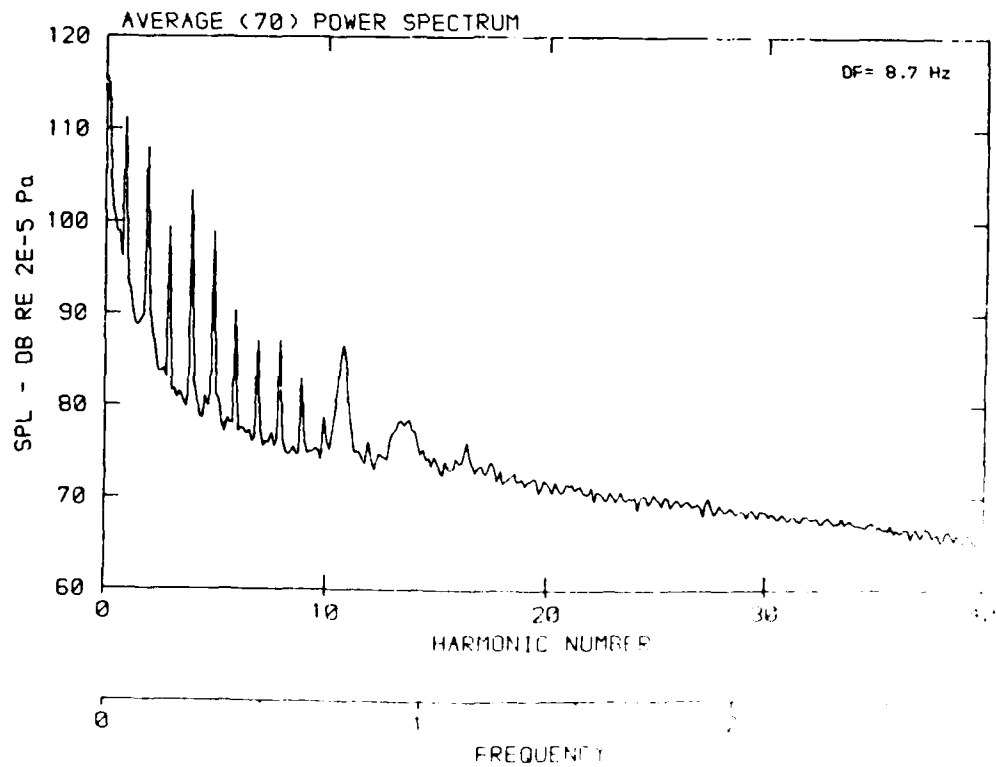
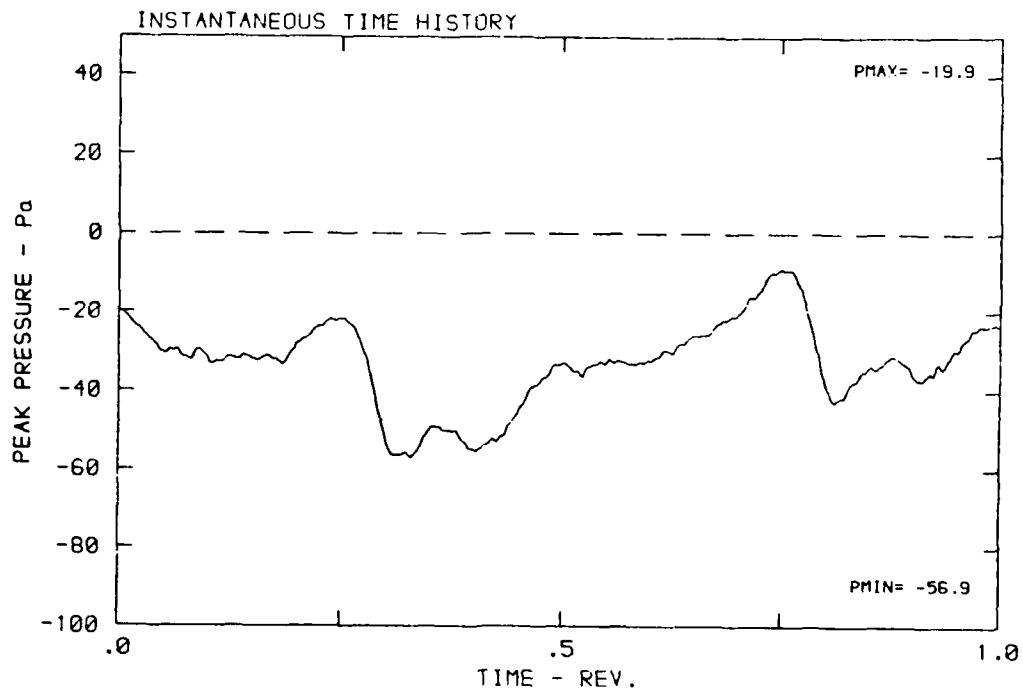
DATA POINT: FC-5 RUN: 125 MP: 8

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



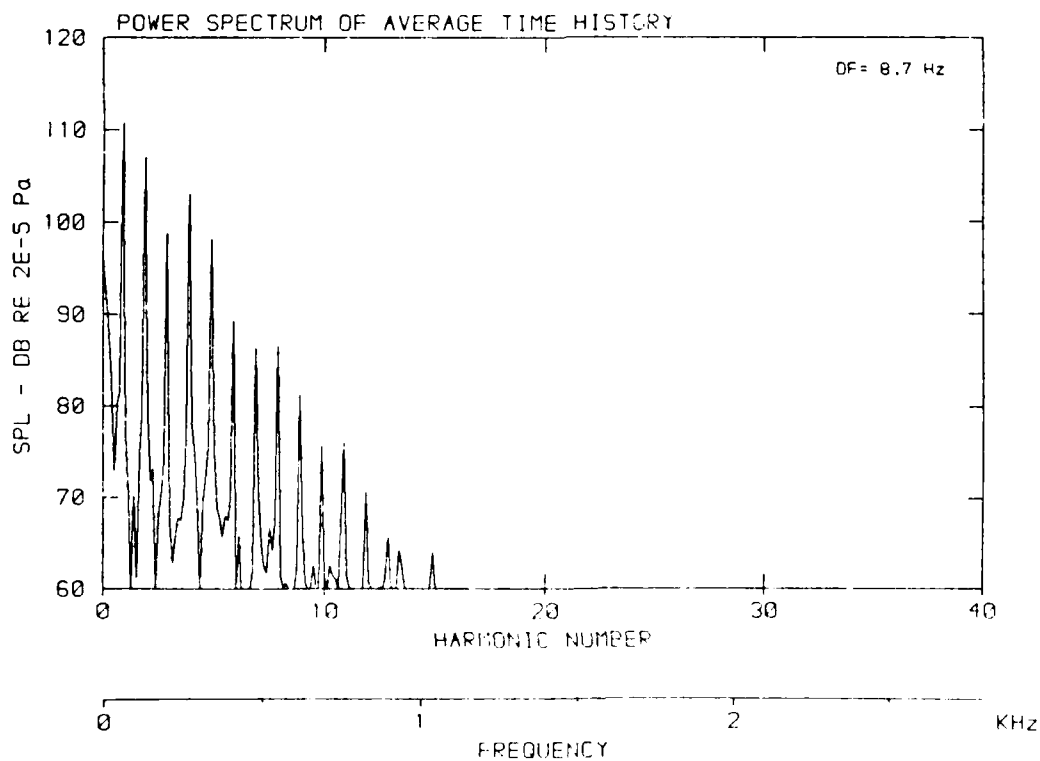
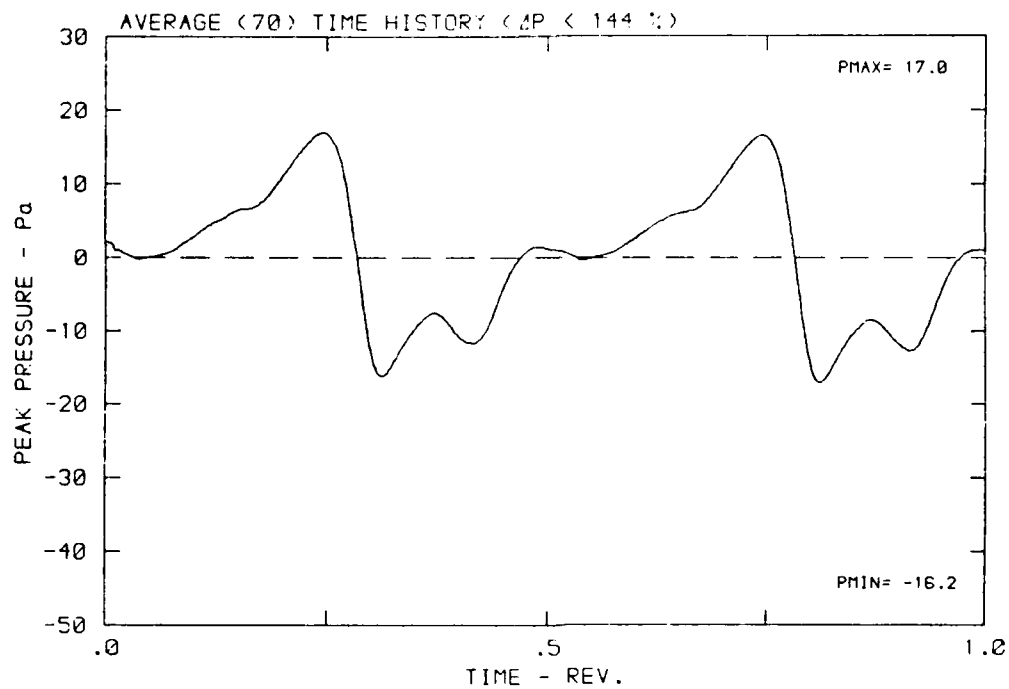
DATA POINT: FC-5 RUN: 125 MP: 9

β : 24.4° MH: .6738 n: 2100 rpm v/u : .230 ϕ : 3.6° T: 288.0 K



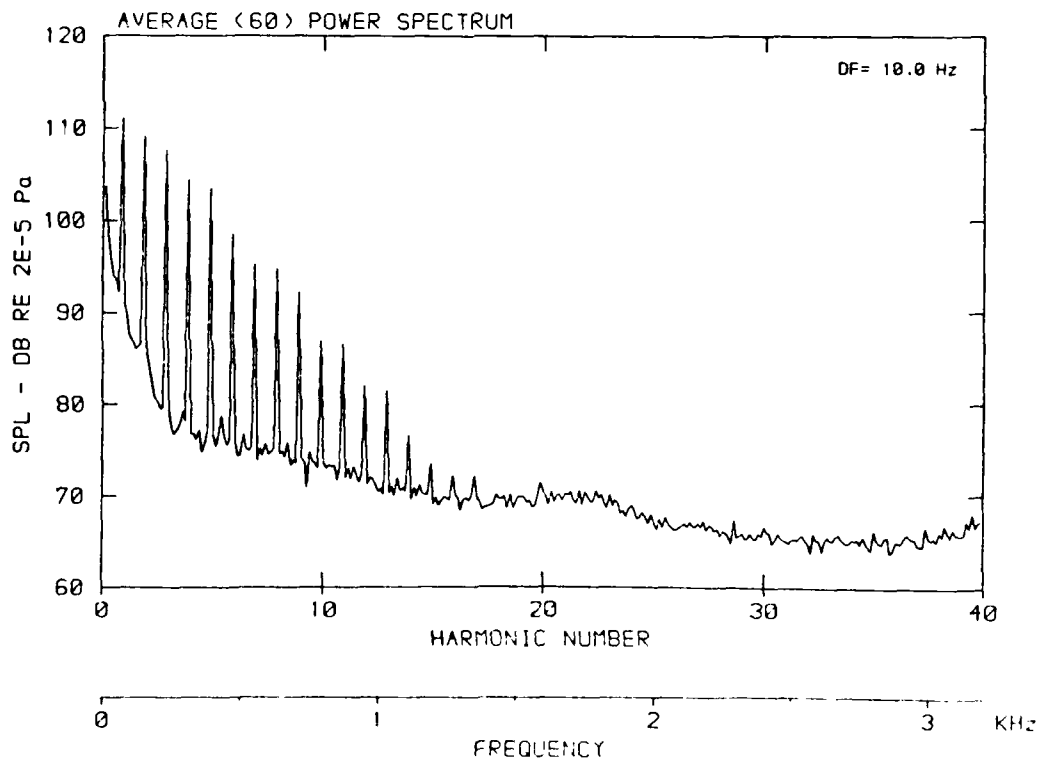
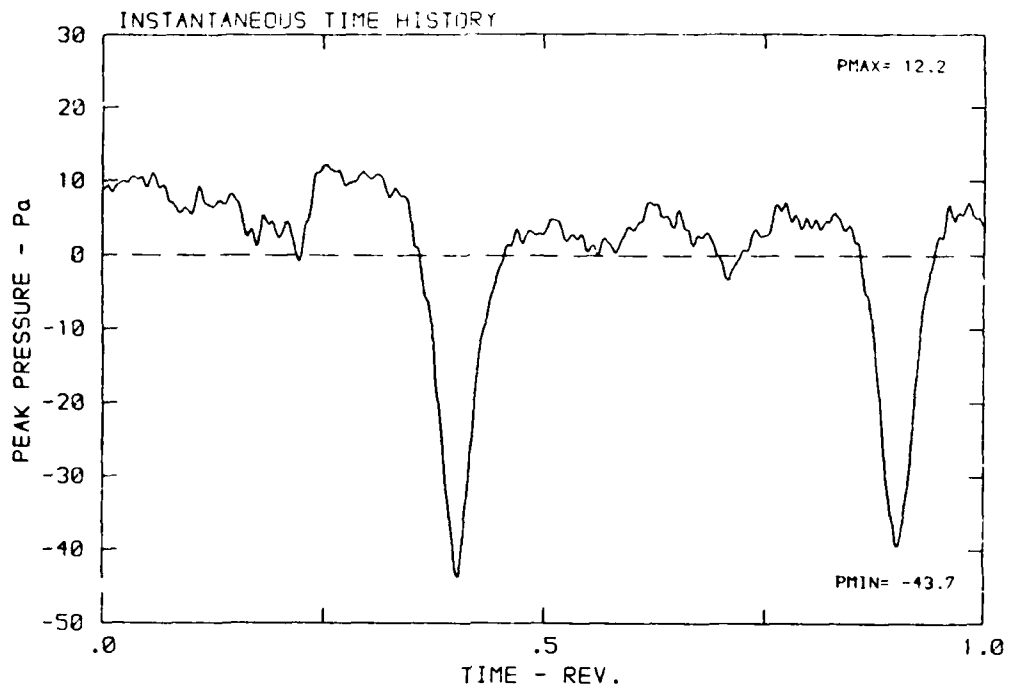
DATA POINT: FC-5 RUN: 125 MP: 9

β : 24.4° MH: .6738 n: 2100 rpm v/u: .230 ϕ : 3.6° T: 288.0 K



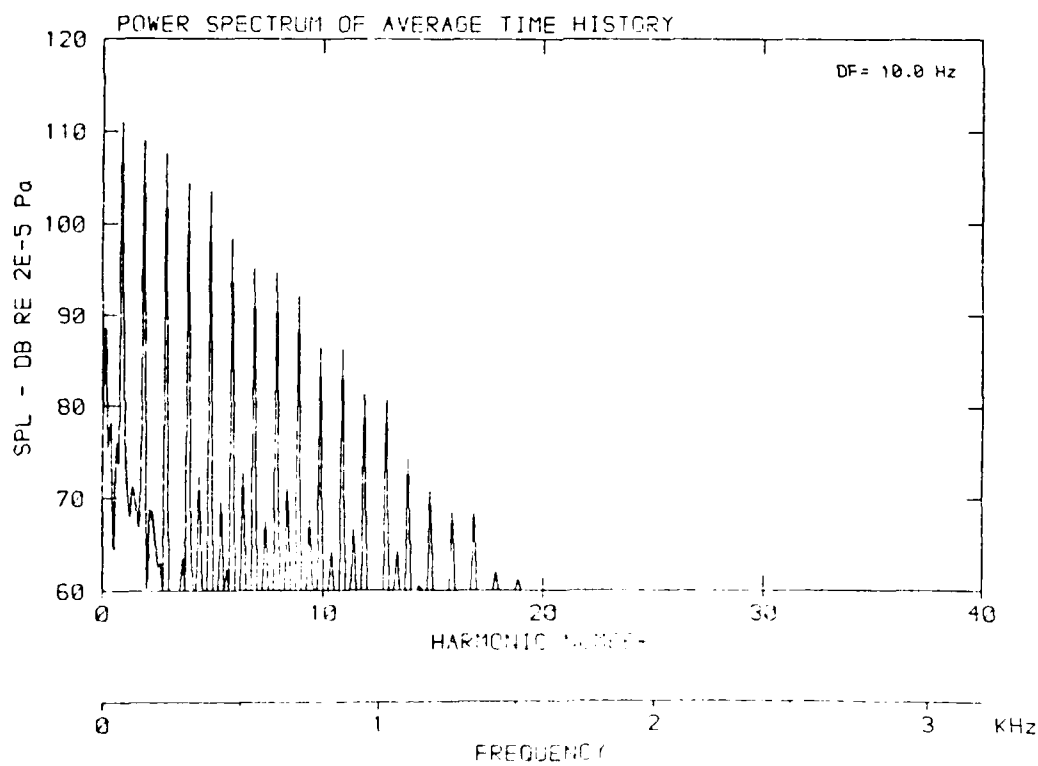
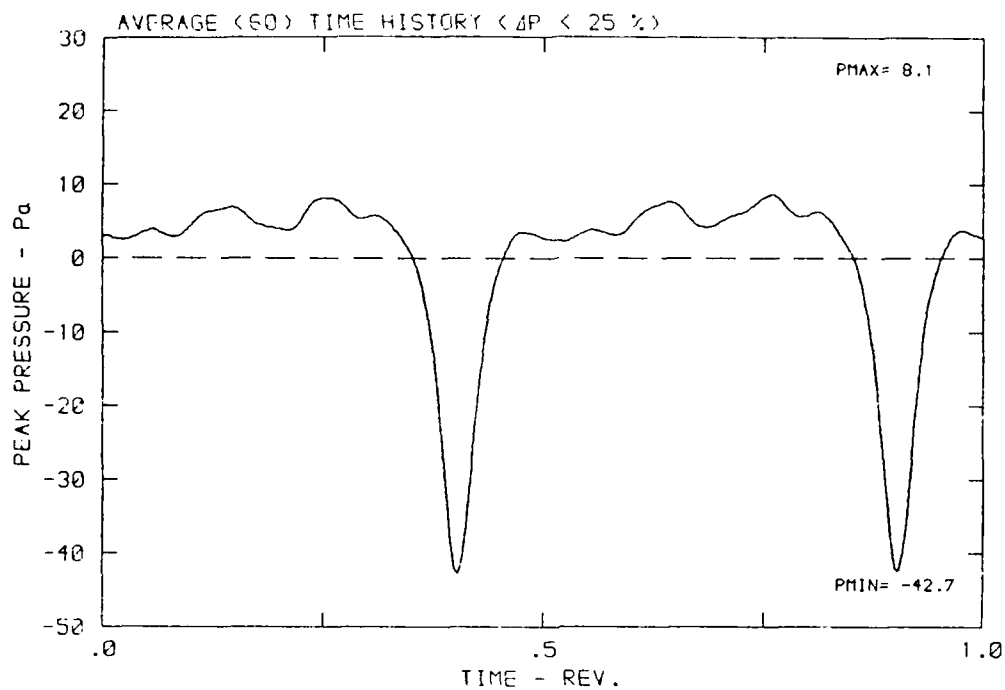
DATA POINT: FC-6 RUN: 126 MP: 1

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 K



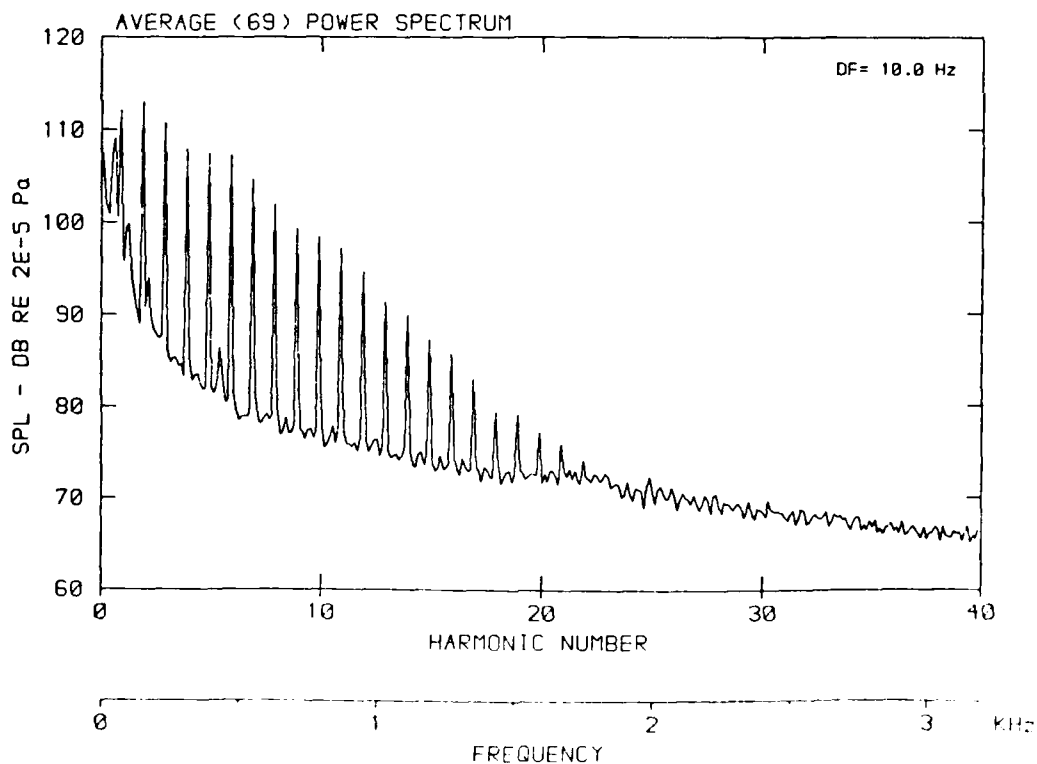
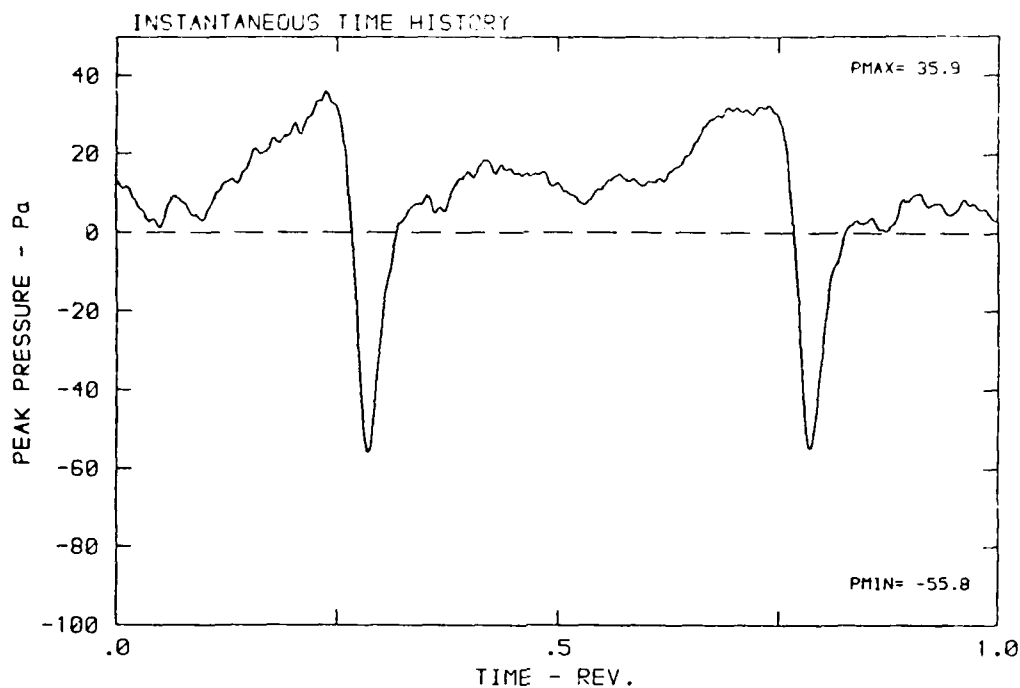
DATA POINT: FC-6 RUN: 126 MP: 1

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 K



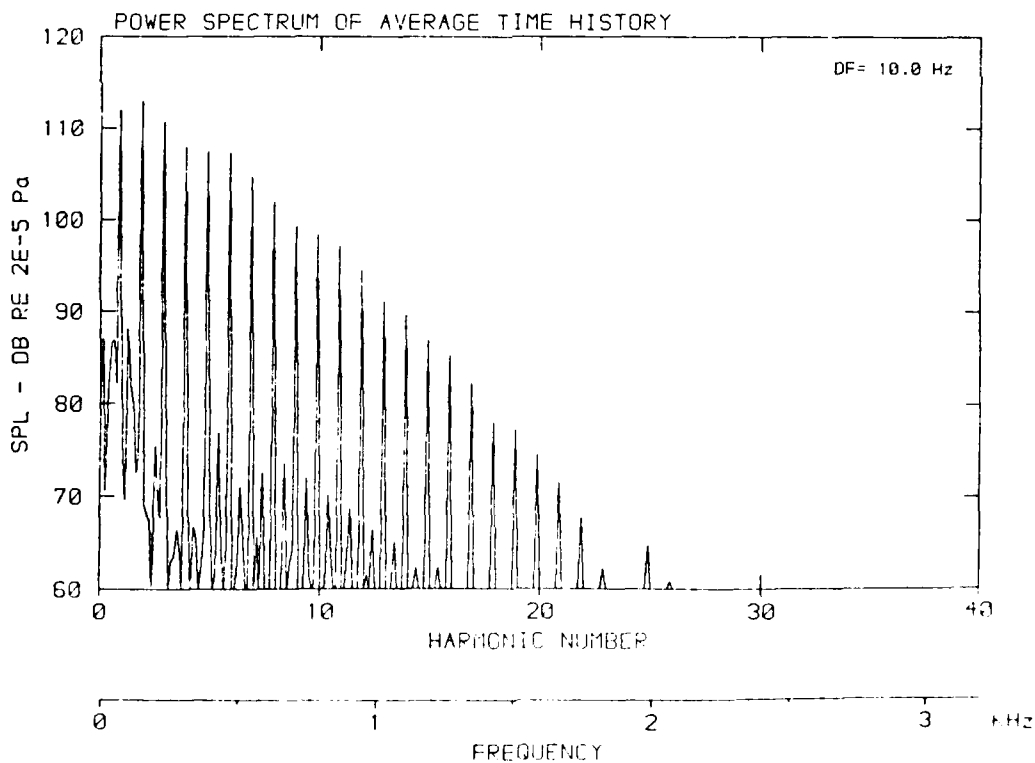
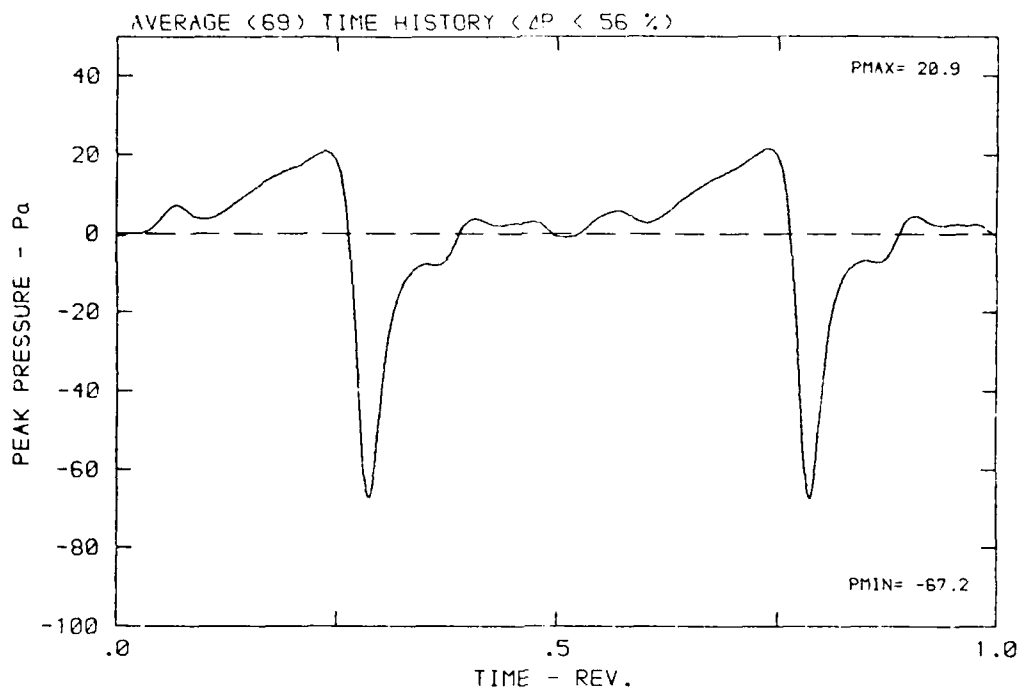
DATA POINT: FC-6 RUN: 126 MP: 2

β : 24.4° MH: .7764 n: 2400 rpm v_{ru} : .263 ϕ : 3.6° T: 287.7 K



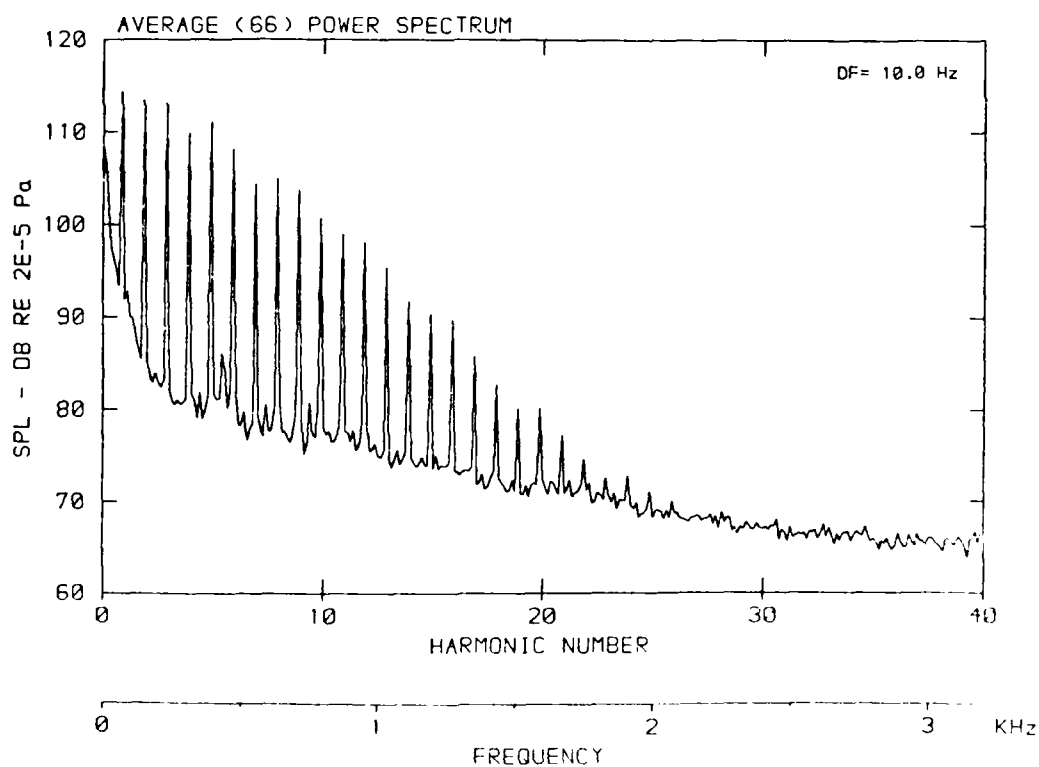
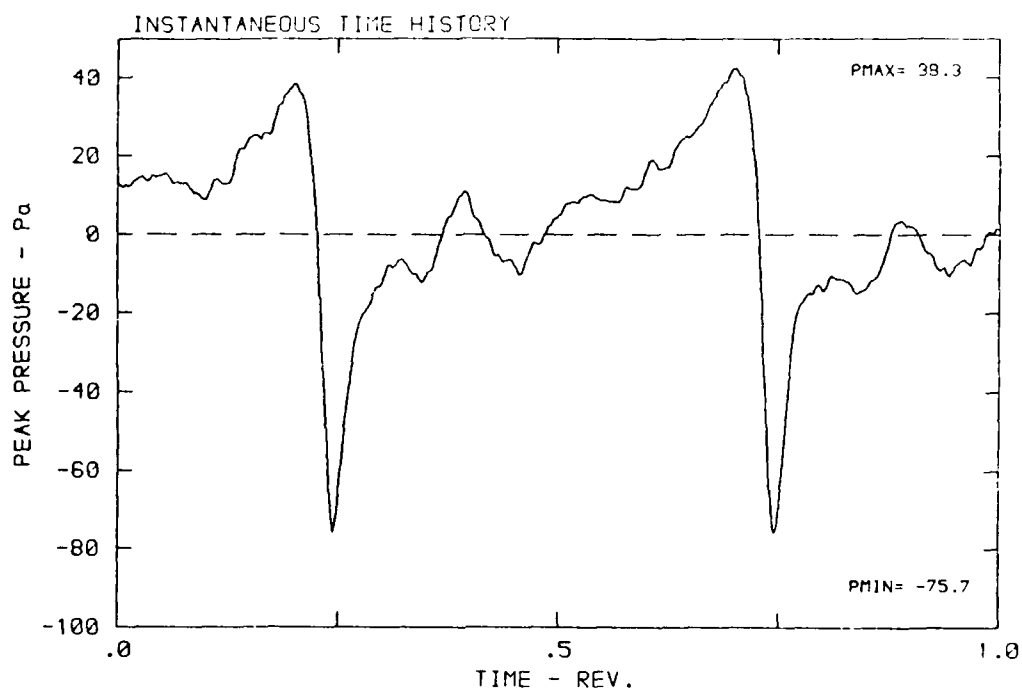
DATA POINT: FC-6 RUN: 126 MP: 2

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 K



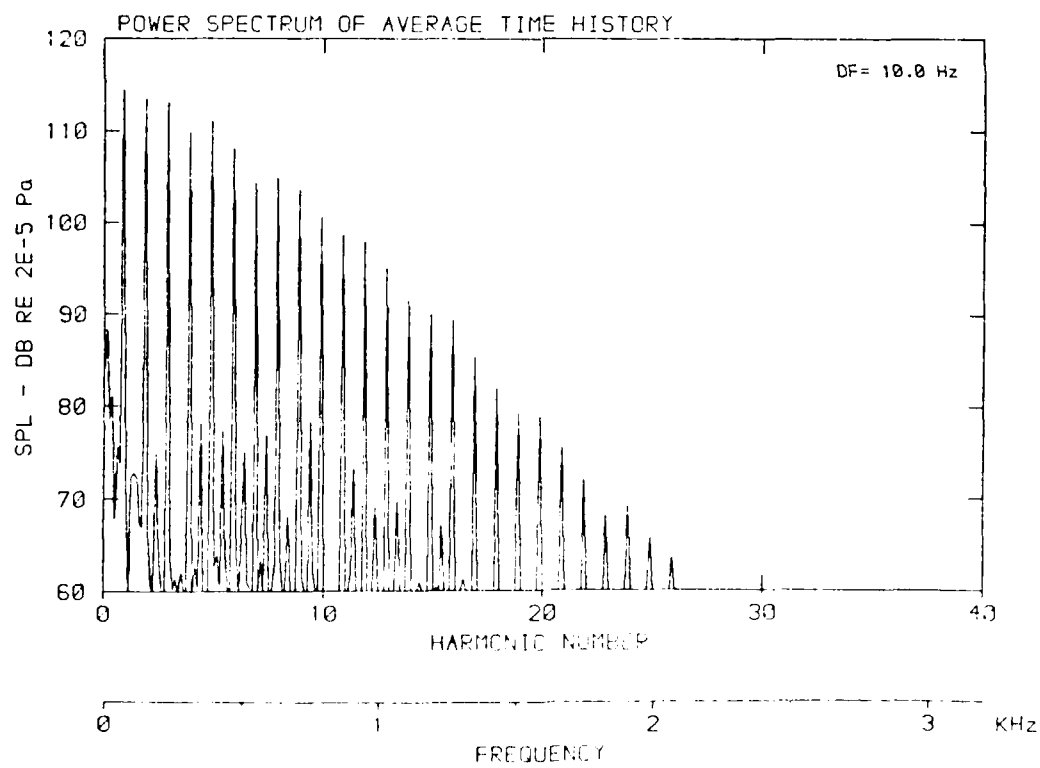
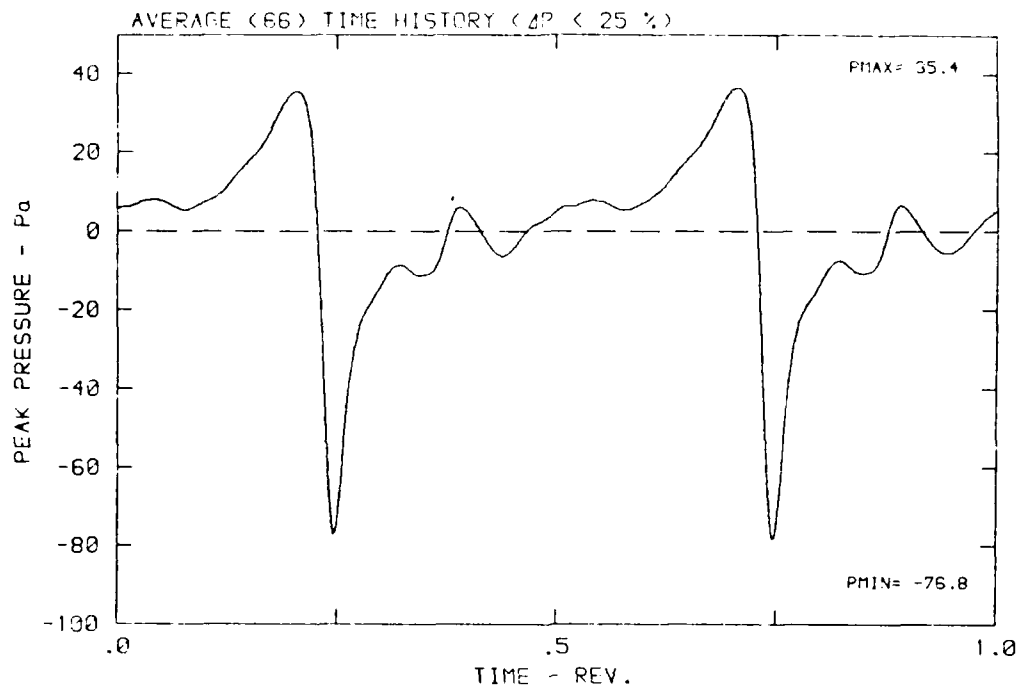
DATA POINT: FC-6 RUN: 126 MP: 3

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° F : 237.7 Hz



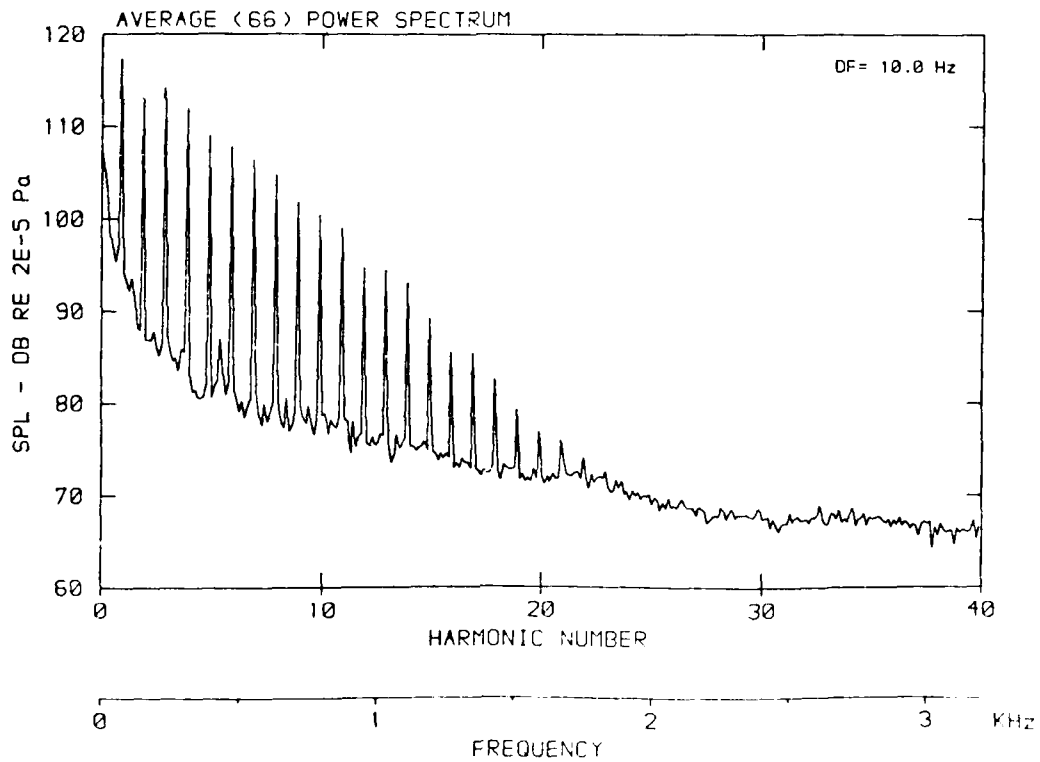
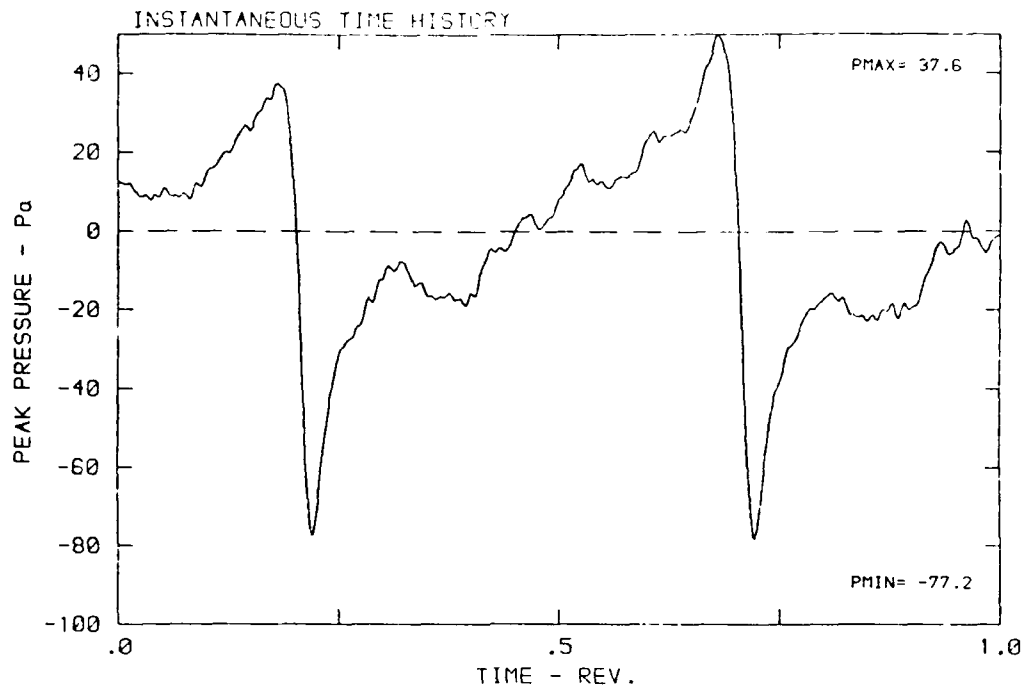
DATA POINT: FC-6 RUN: 126 MP: 3

β : 24.4° MH: .776+ n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 K



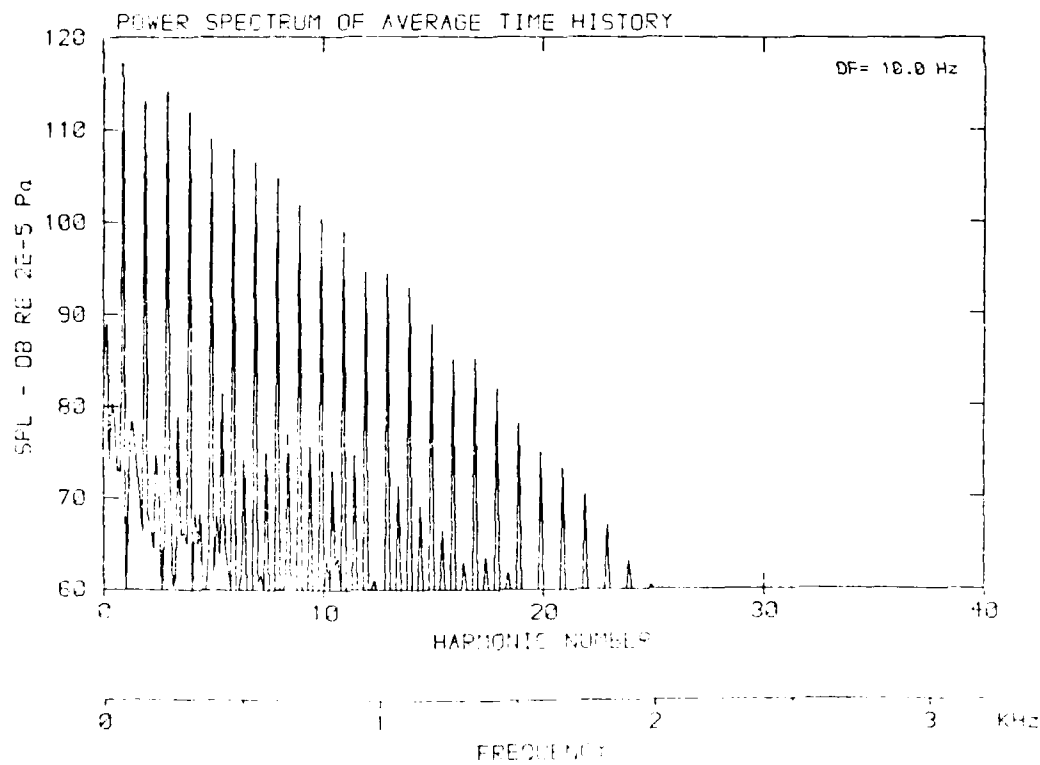
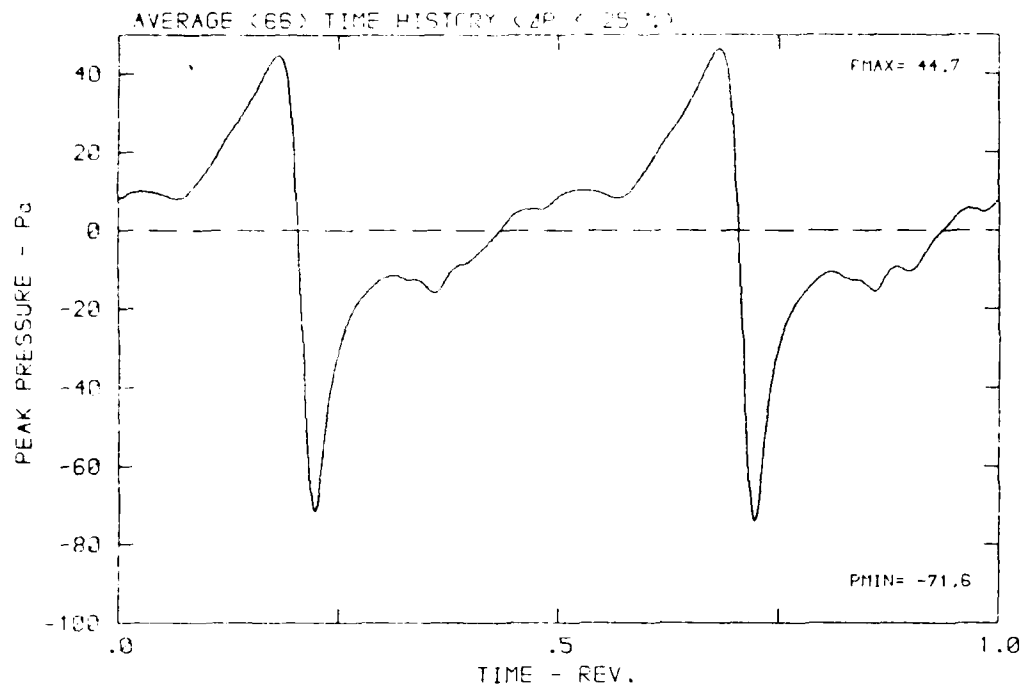
DATA POINT: FC-6 PIN: 126 MP: 4

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 °



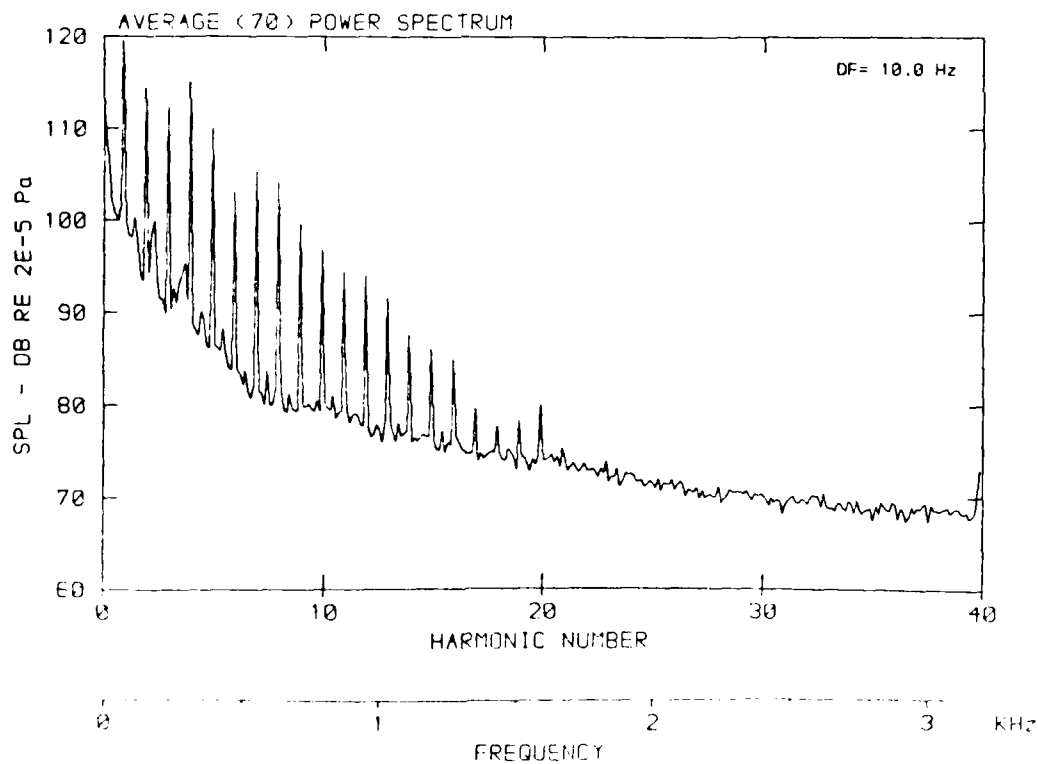
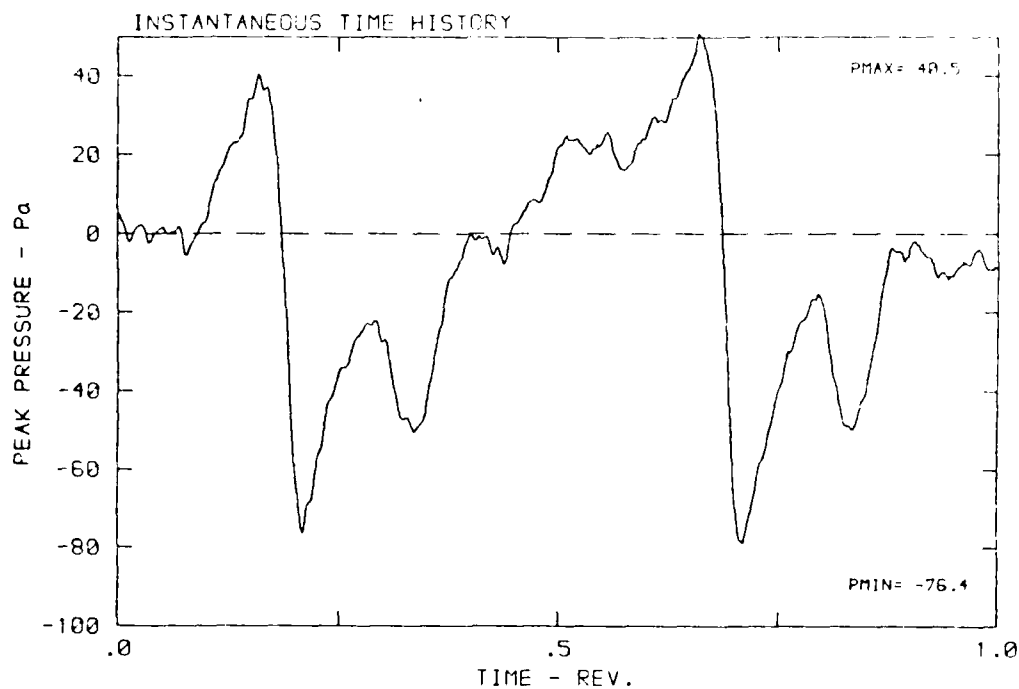
DATA POINT: FC-6 RUN: 126 MP: 4

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 K



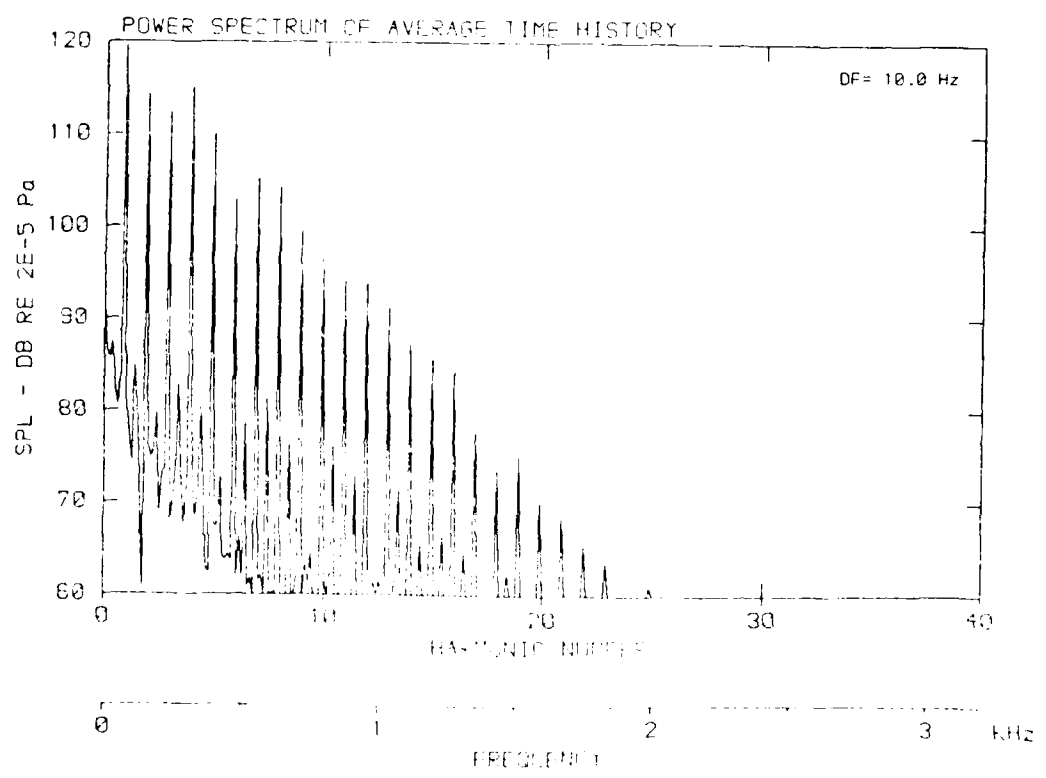
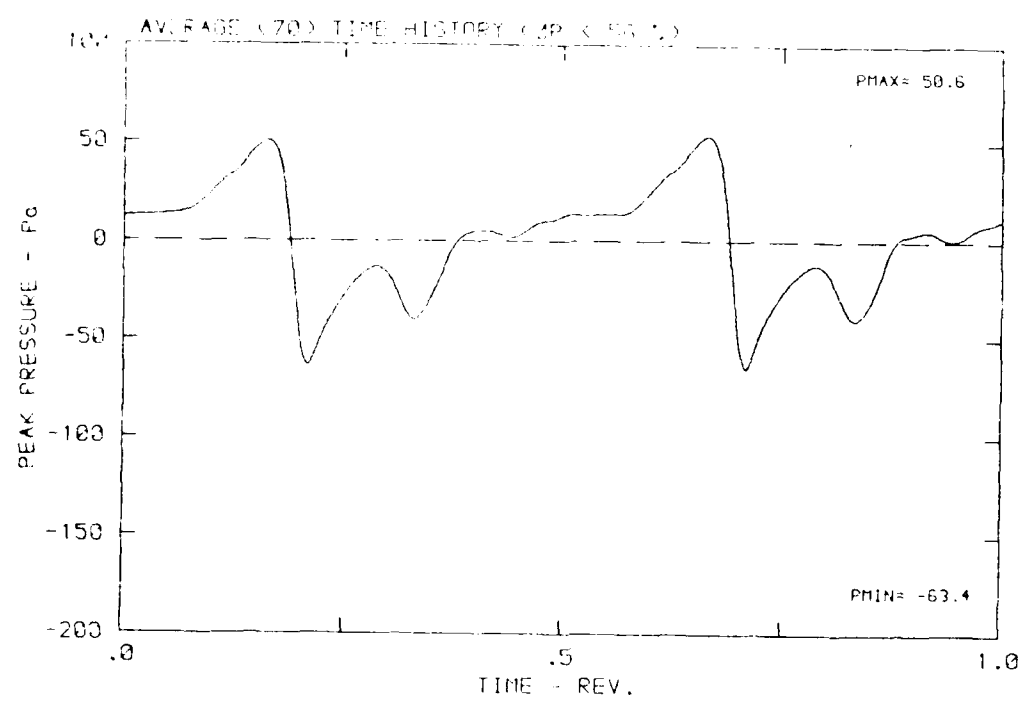
DATA POINT: FC-6 PUN: 126 MP: 0

β : 24.4° MH: .7754 n: 2400 rpm vru: .263 ϕ : 3.6° i: 25.17



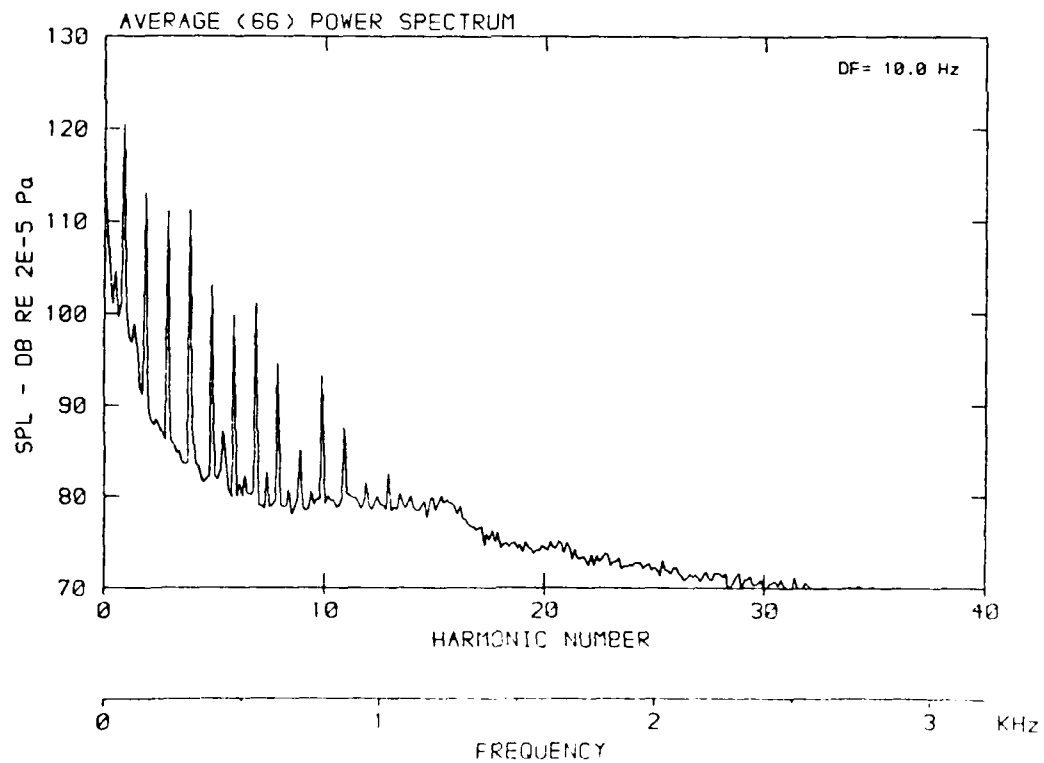
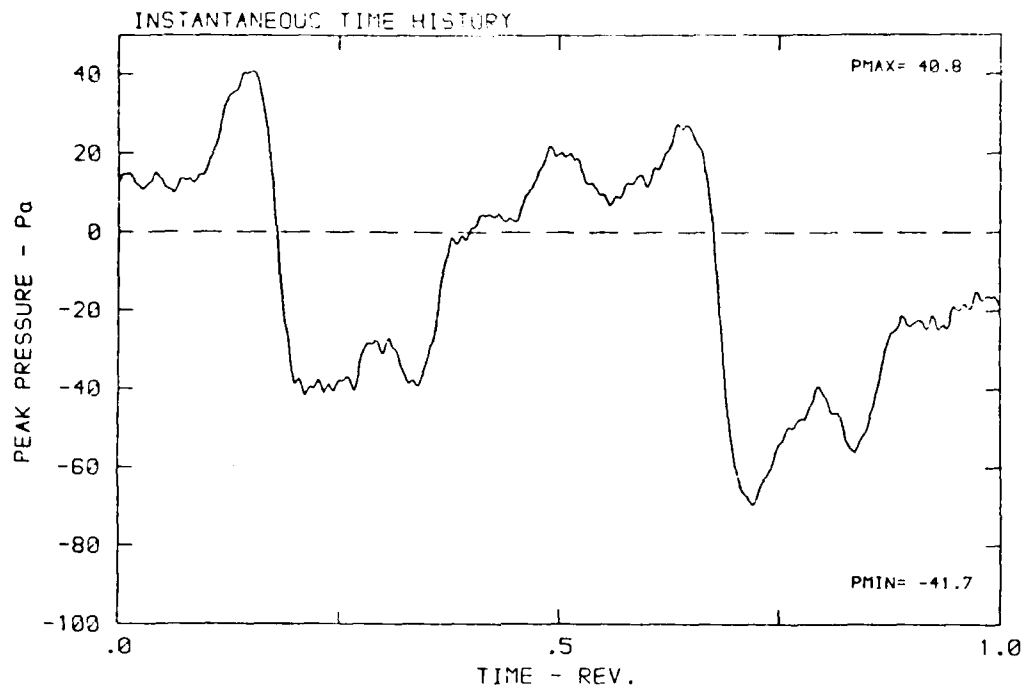
DATA POINT: HD-6 RUN: 126 MP: 5

β : 24.4° θ : .7764 n : 2400 rpm v_{θ} : .263 ϕ : 3.6° T : 287.7 K



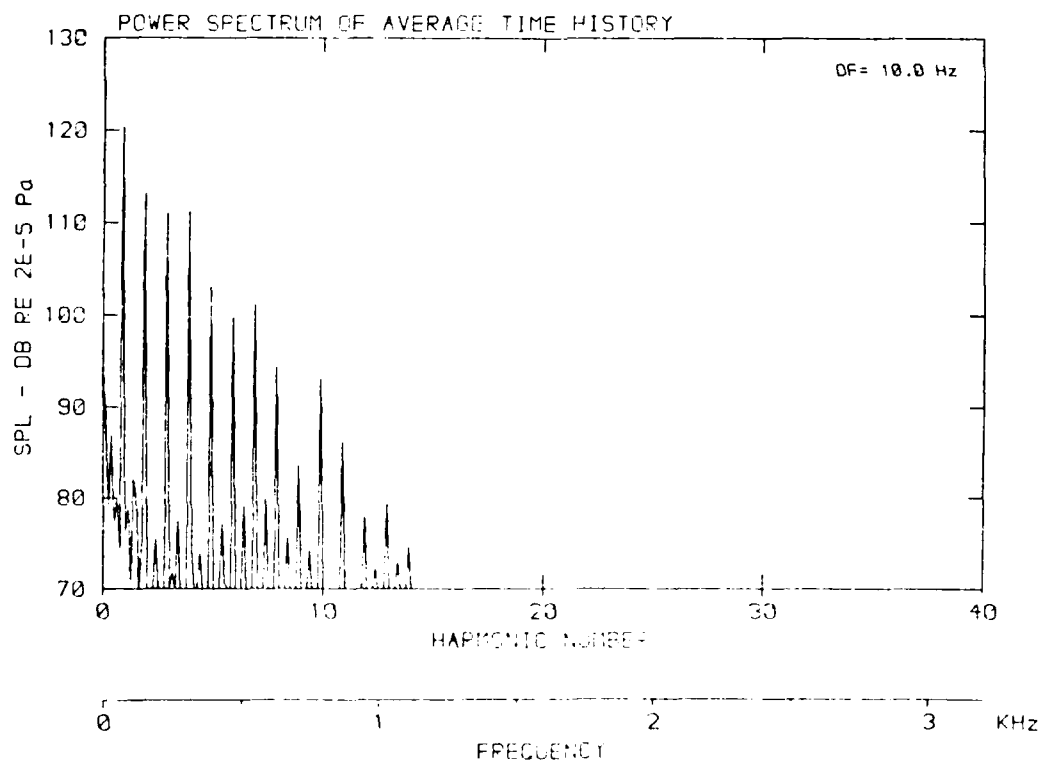
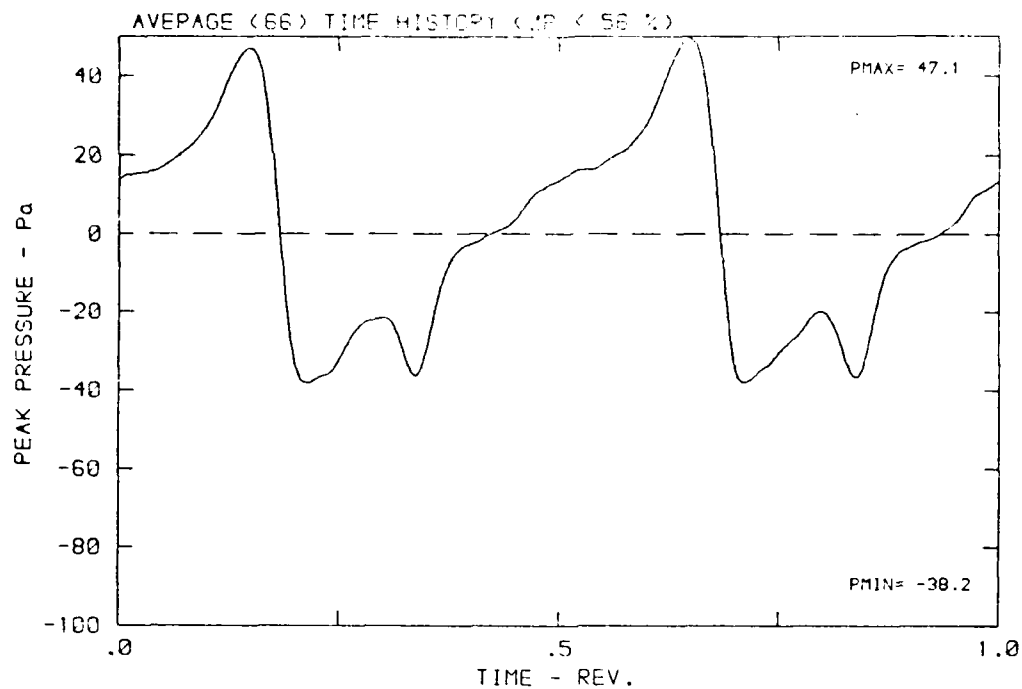
DATA POINT: FC-6 RUN: 126 MP: 6

β : 24.4° MH: .7764 n: 2400 rpm v/u: .263 ϕ : 3.6° T: 287.7 K



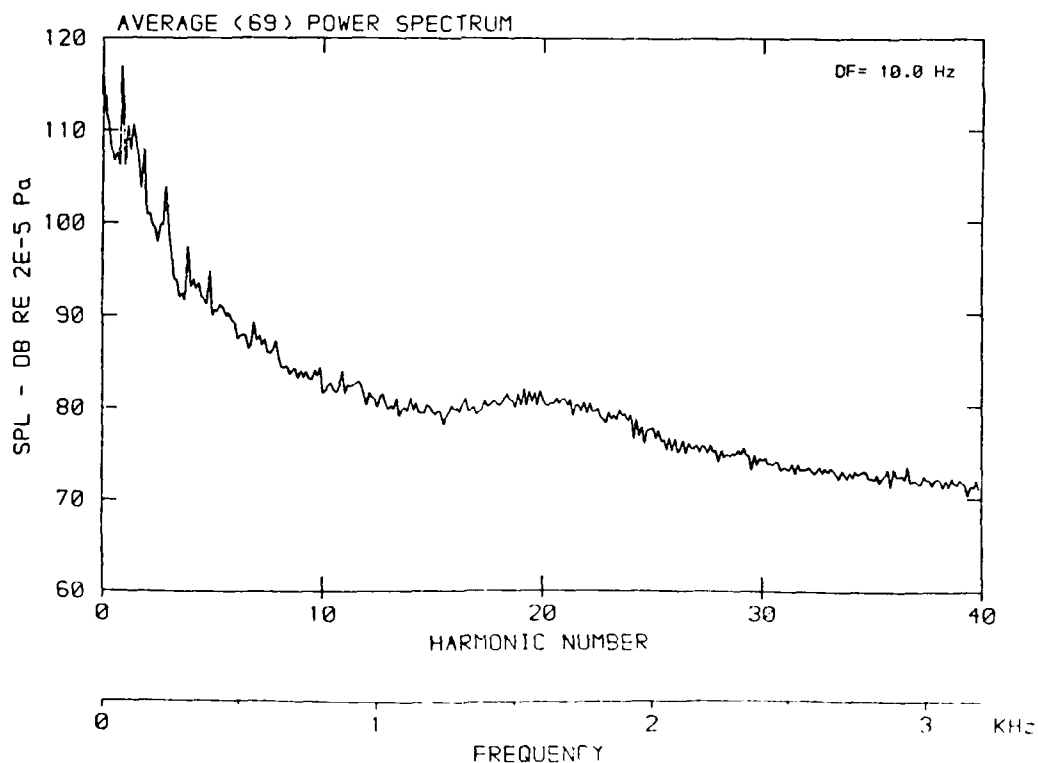
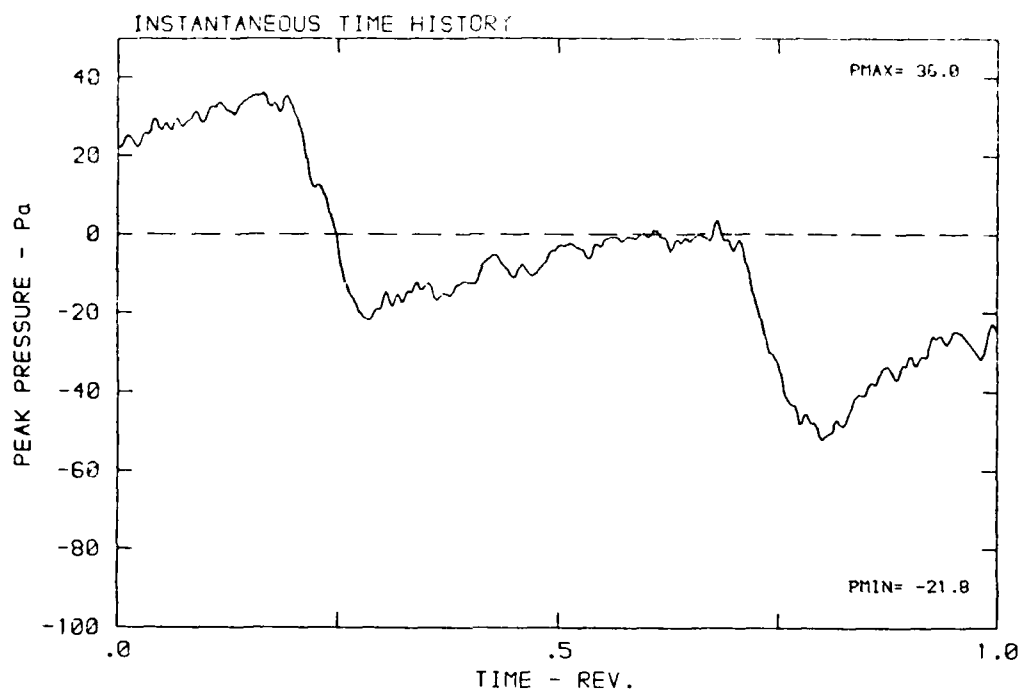
DATA POINT: FC-6 RUN: 126 MP: 6

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 287.7 K



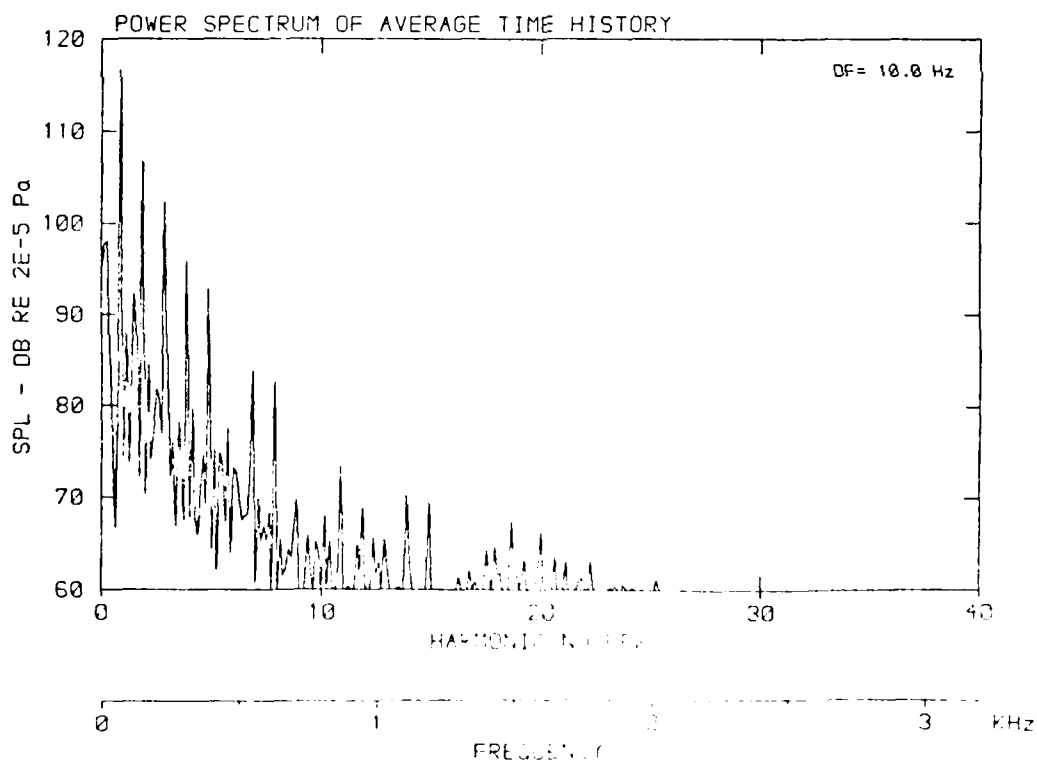
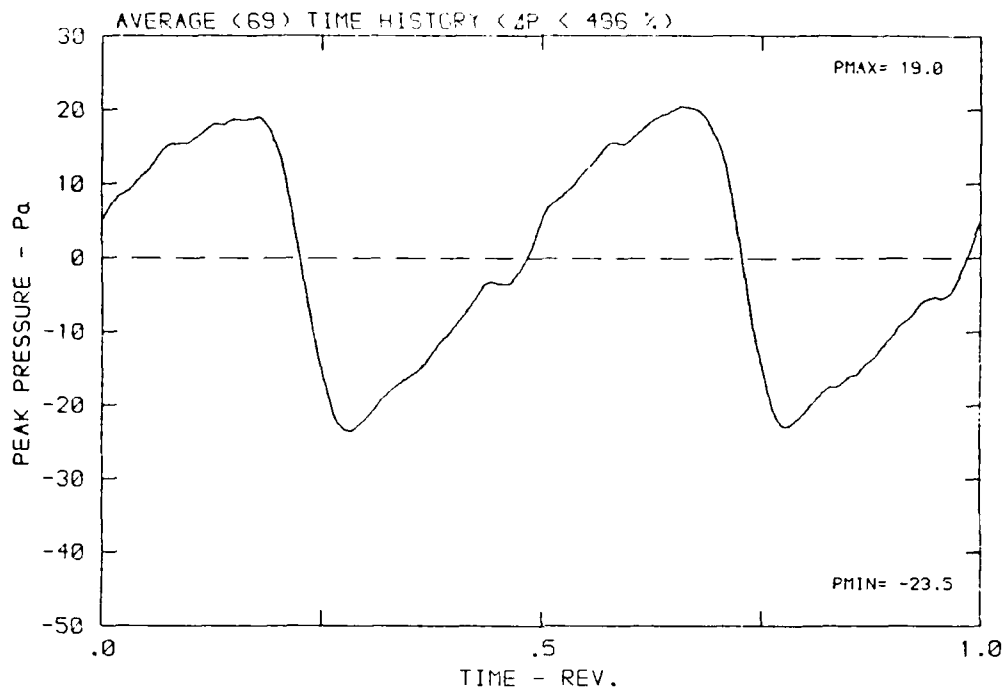
DATA POINT: FC-6 RUN: 126 MP: 7

β : 24.4° MH: .7764 n: 2400 rpm vru: .263 ϕ : 3.6° T: 1.57.7



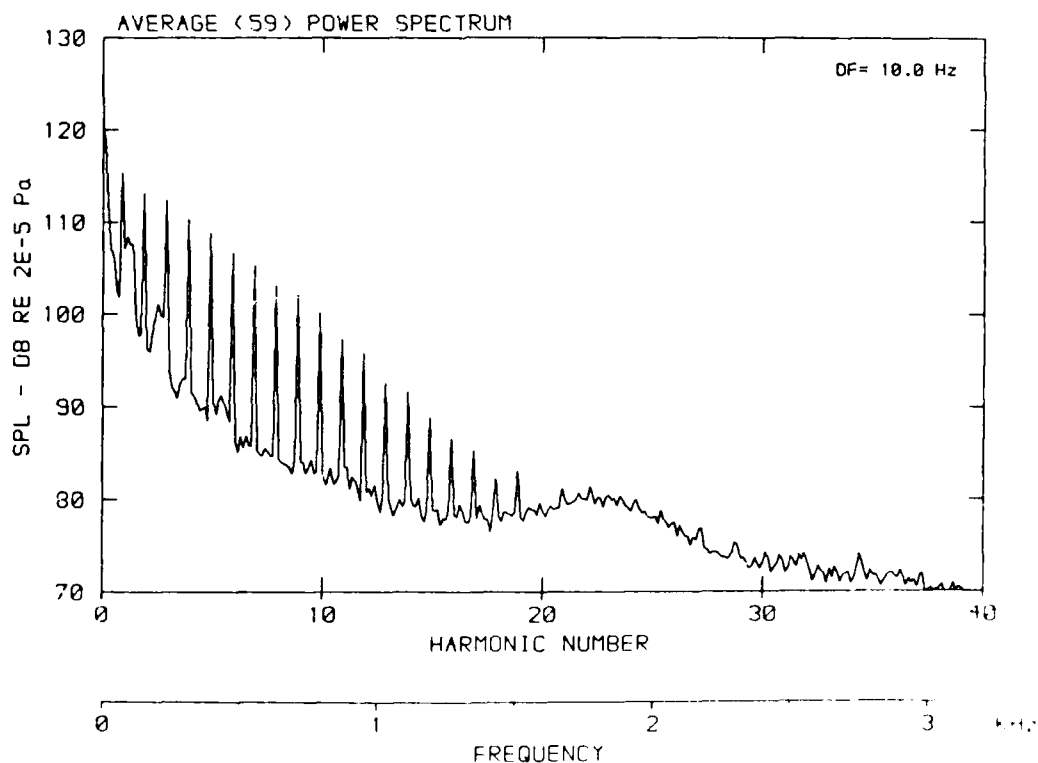
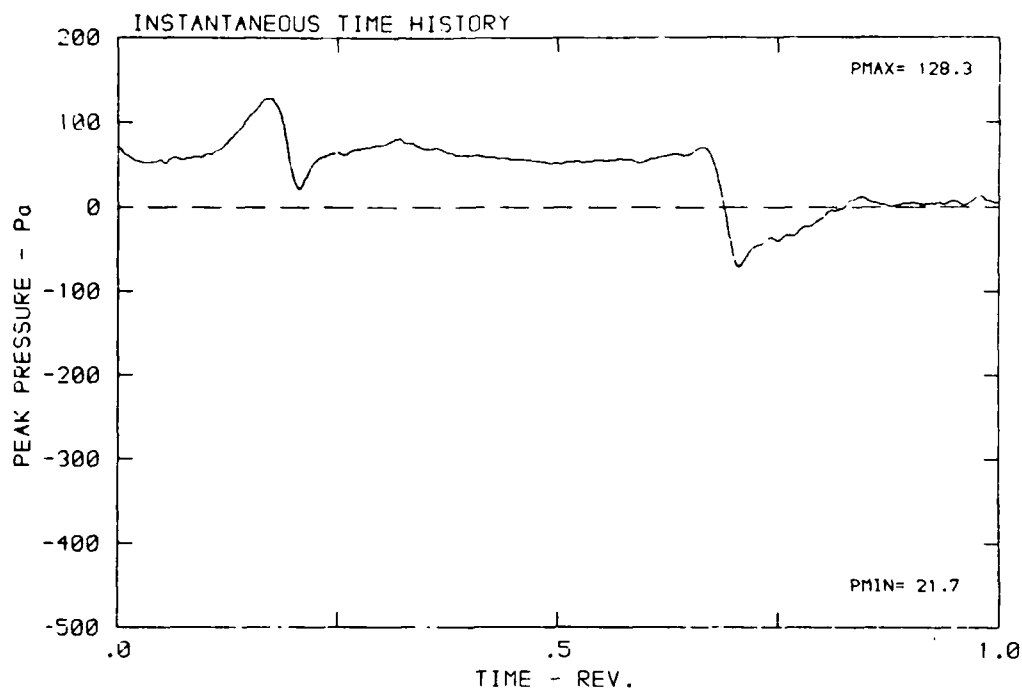
DATA POINT: FC-6 RUN: 126 MP: 7

β : 24.4° MH: .7764 n: 2400 rpm v/u : .263 ϕ : 3.6° T: 267.7 K



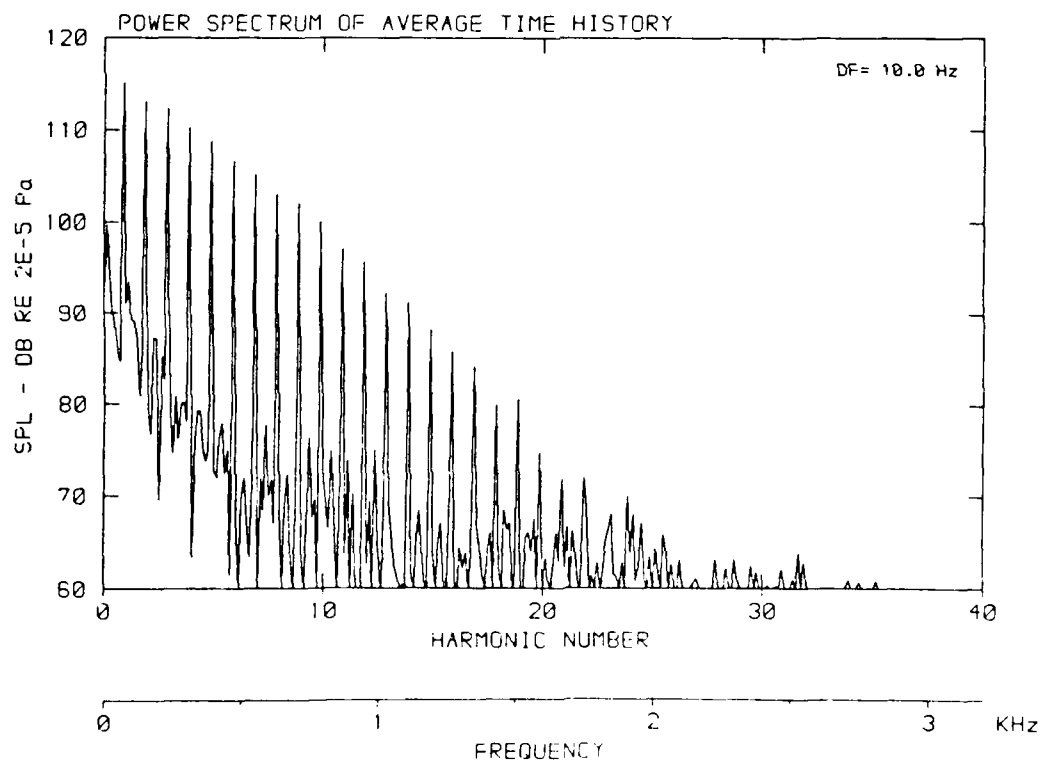
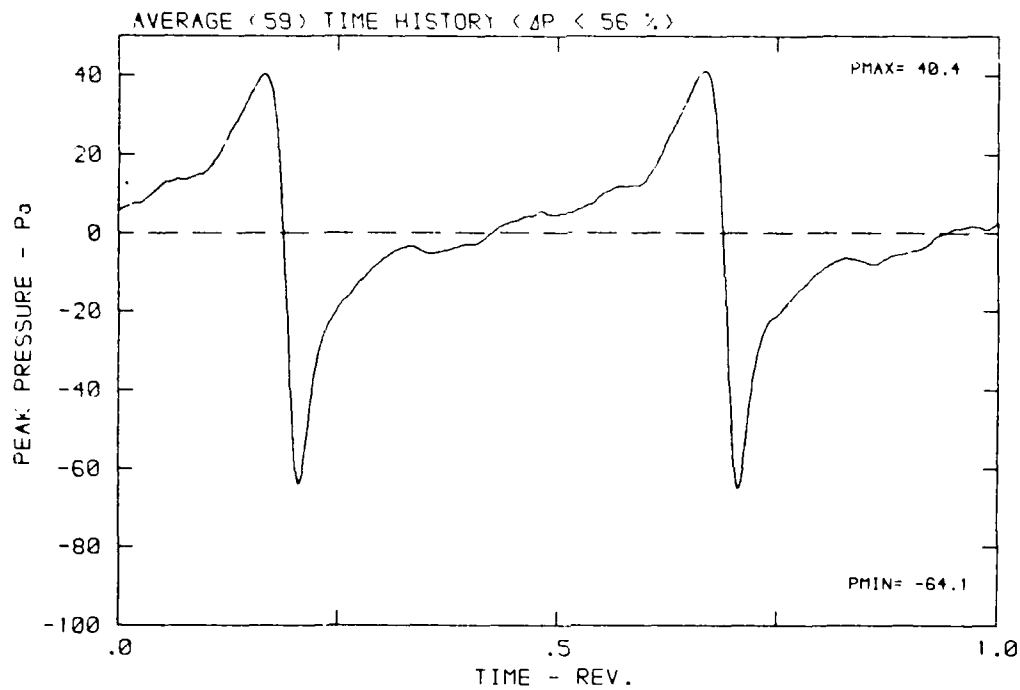
DATA POINT: FC-6 RUN: 126 MP: 8

β : 24.4° MH: .7764 n: 2400 rpm v/u: .263 ϕ : 3.6° T: 287.7 K



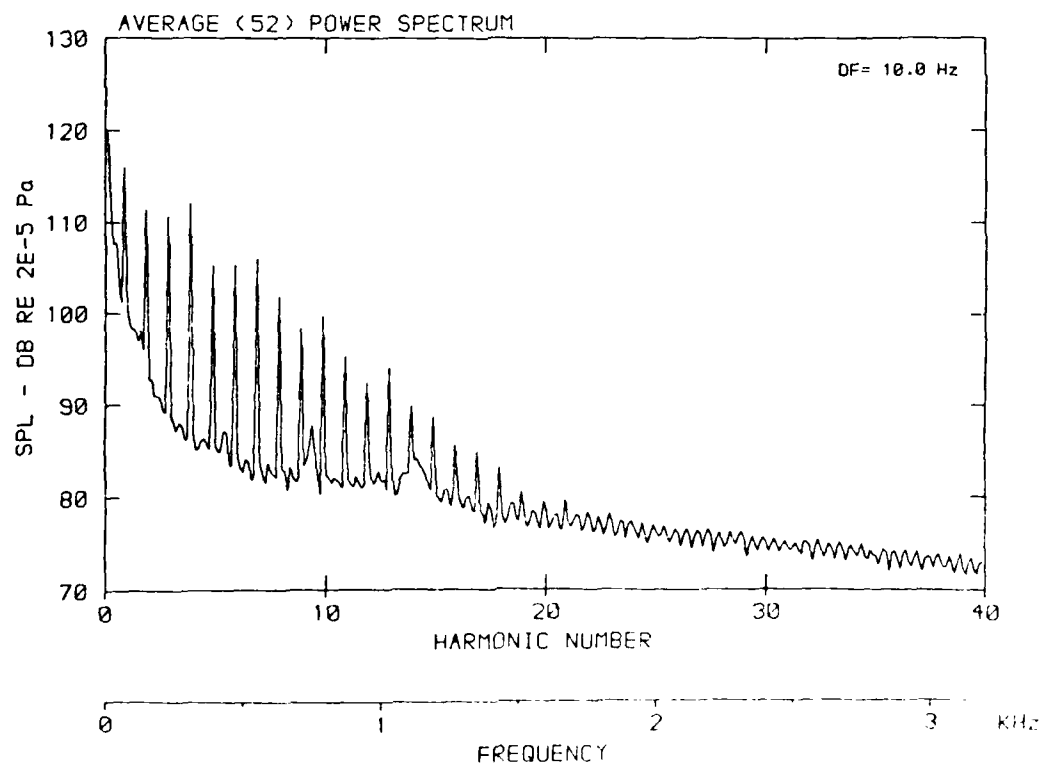
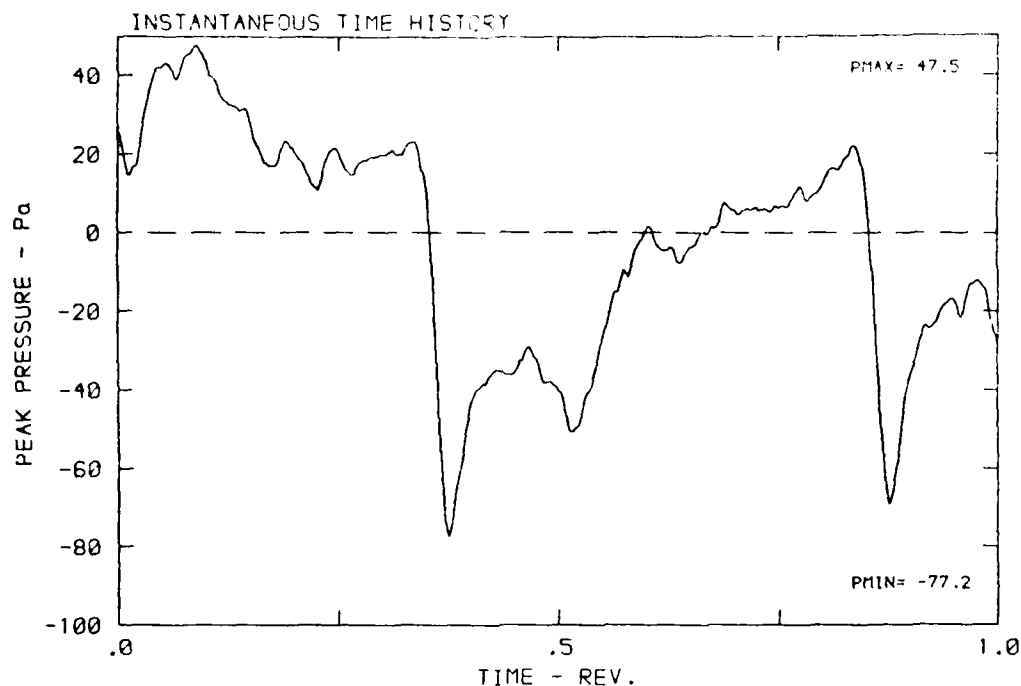
DATA POINT: FC-6 RUN: 126 MP: 8

β : 24.4° MH: .7764 n: 2400 rpm v/u: .263 ϕ : 3.6° T: 287.7 K



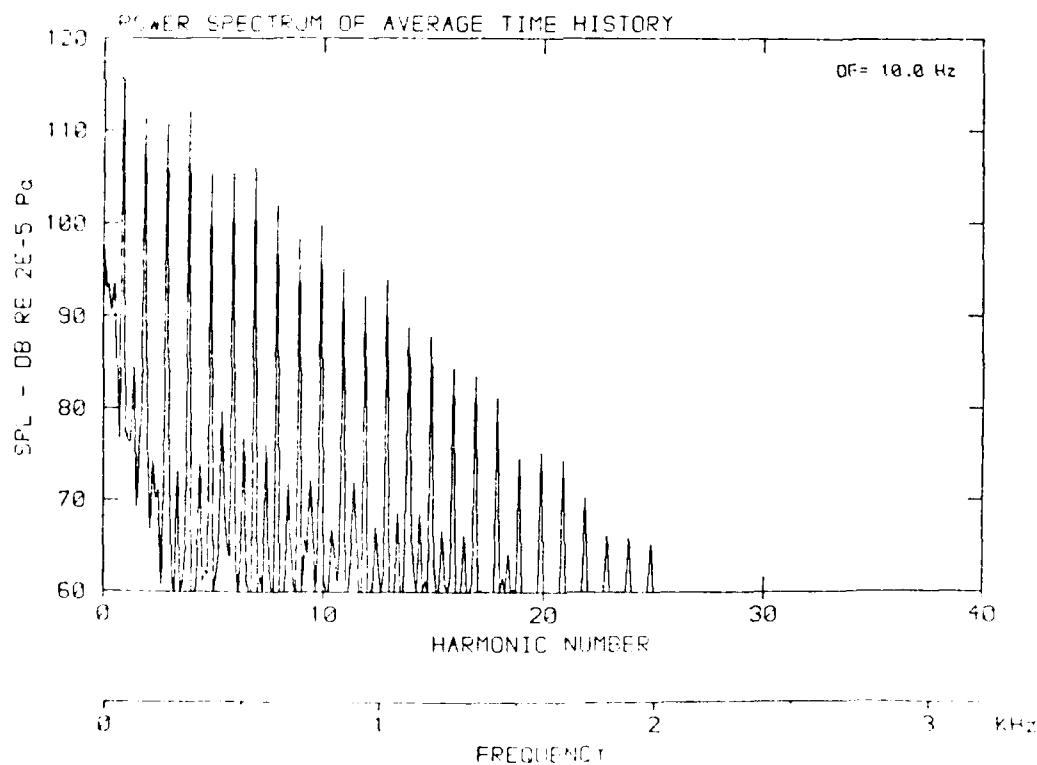
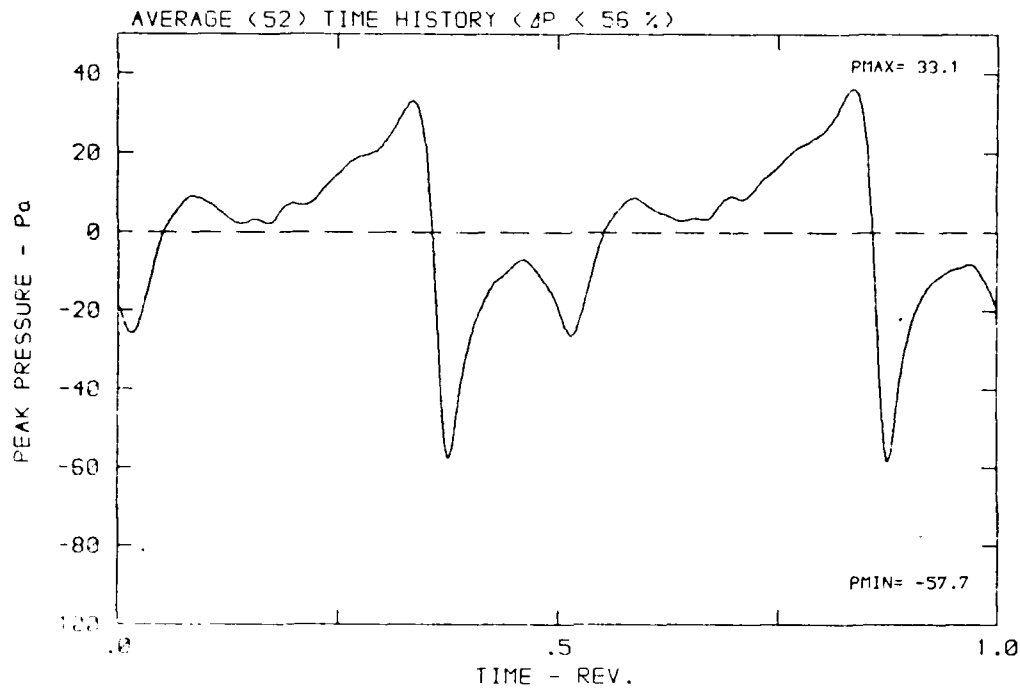
DATA POINT: FC-6 RUN: 126 MP: 9

β : 24.4° MH: .7764 n: 2400 rpm vru: .263 ϕ : 3.6° T: 287.7 K



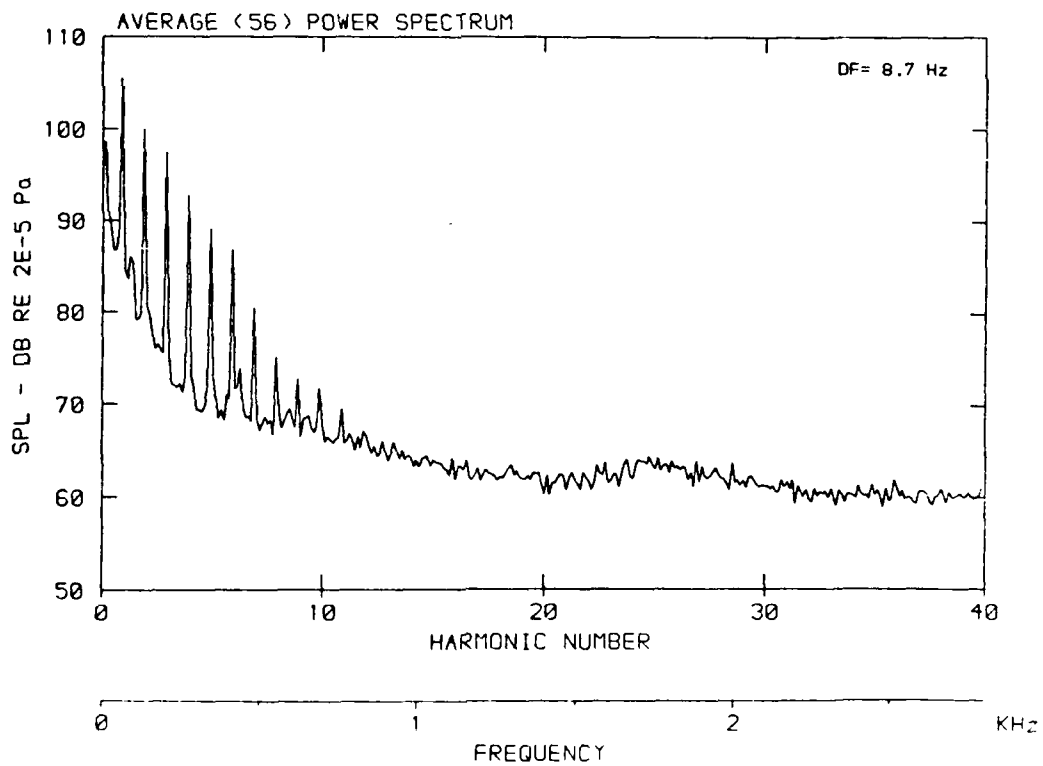
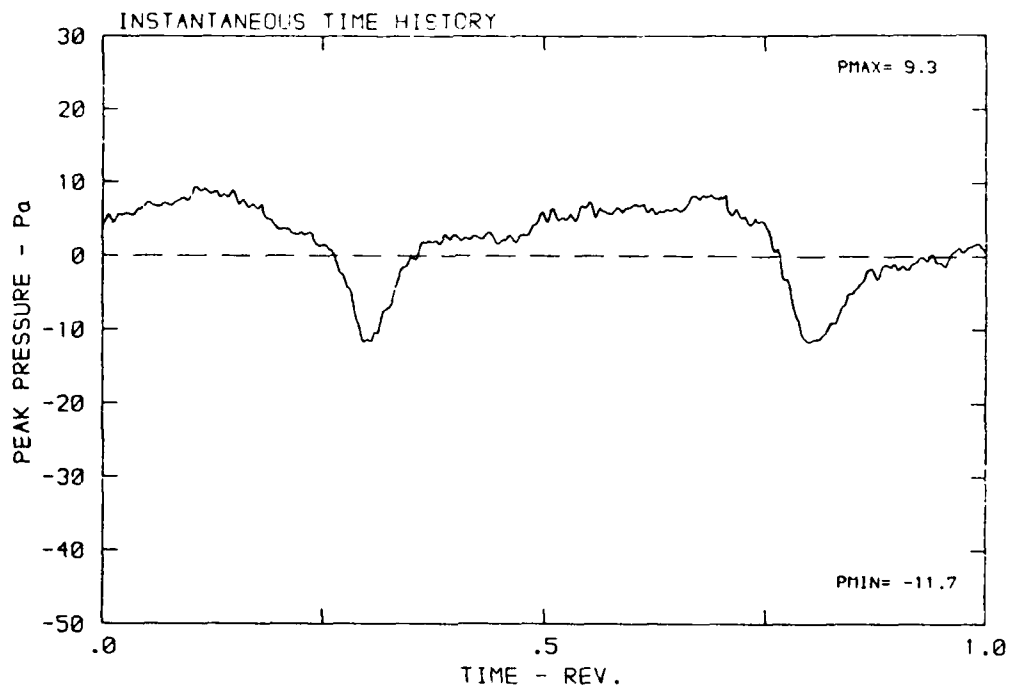
DATA POINT: FC-6 RUN: 126 MP: 9

β : 24.4° MH: .7764 n: 2400 rpm v/u: .263 ϕ : 3.6° T: 287.7 K



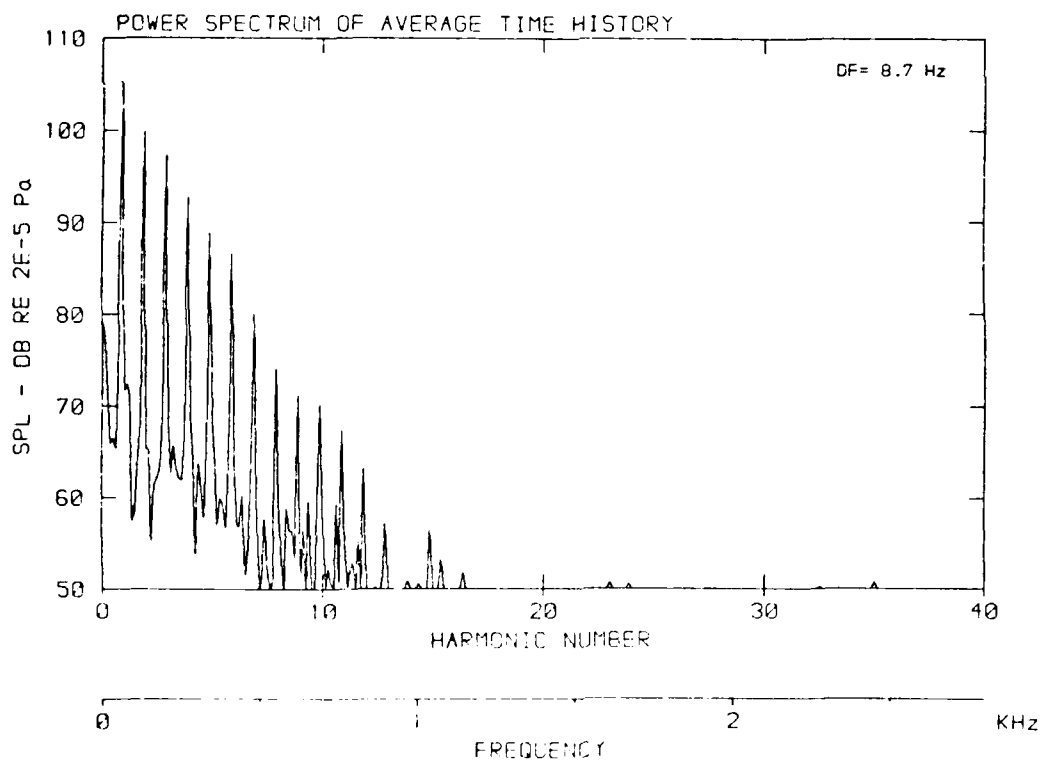
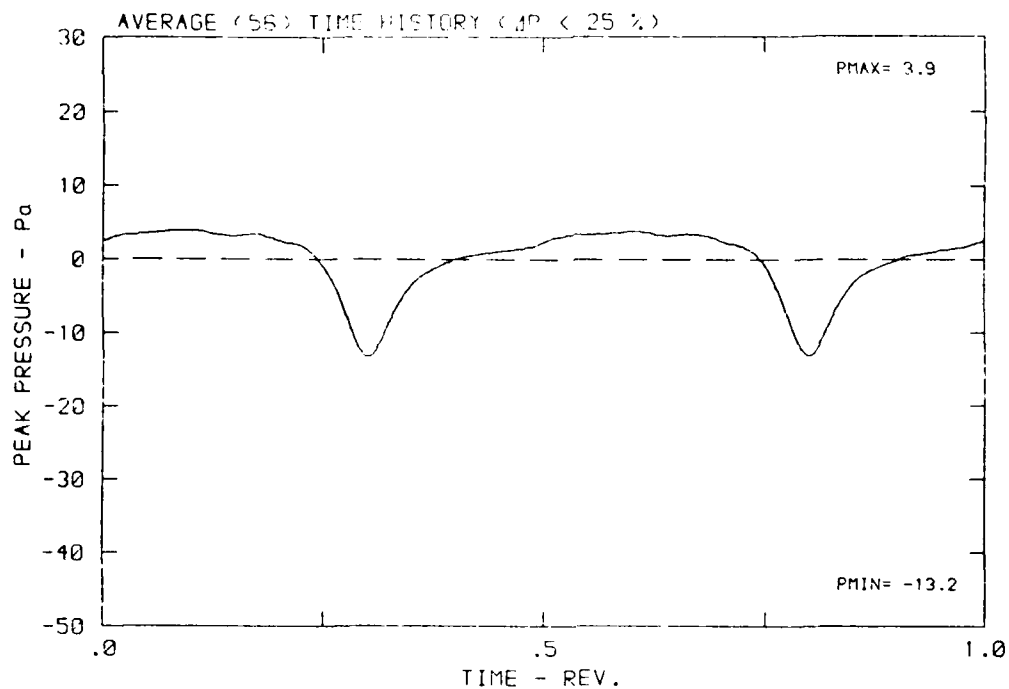
DATA POINT: EC-1 RUN: 130 MP: 1

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



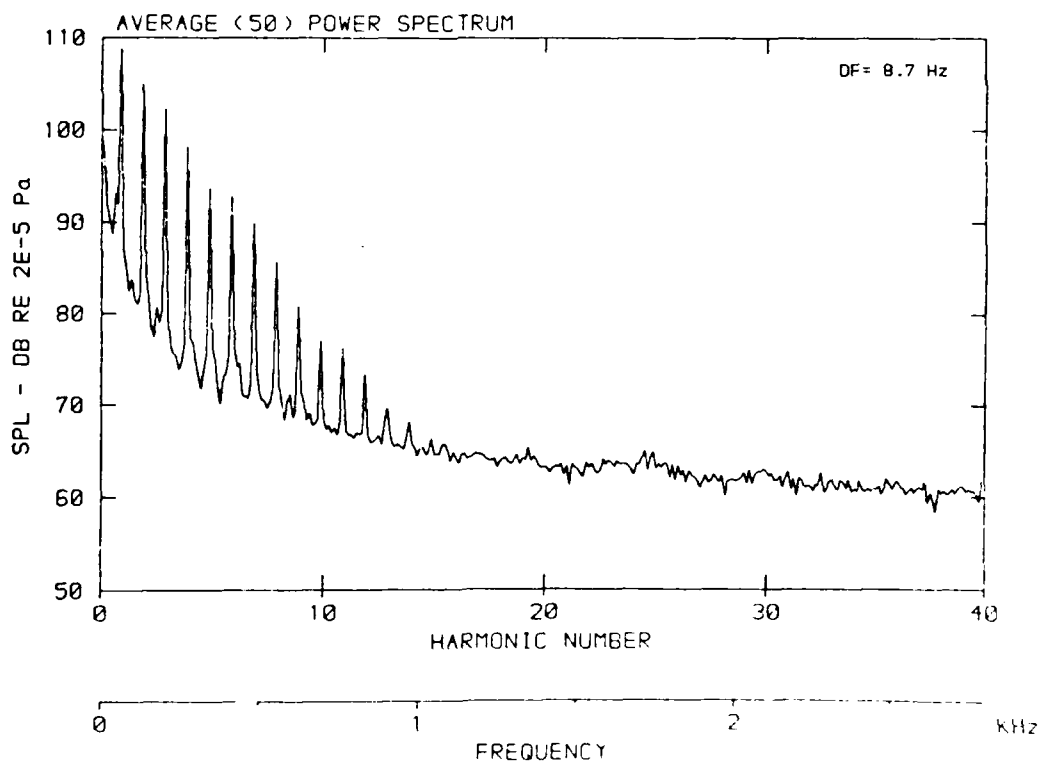
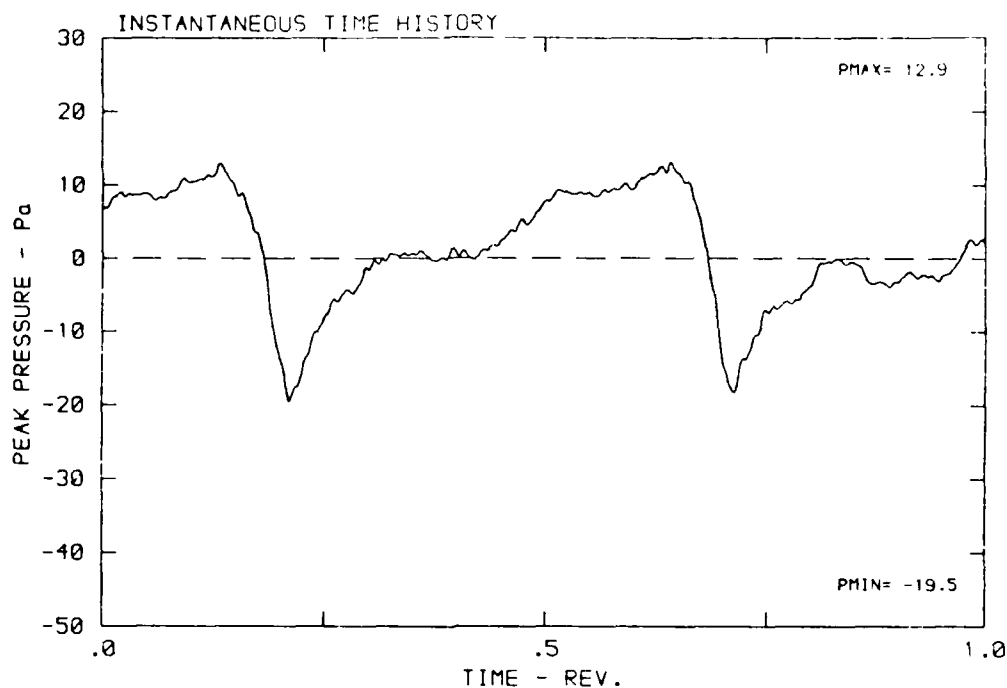
DATA POINT: EC-1 RUN: 130 MP: 1

β : 20.7° MH: .6752 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 287.0 K



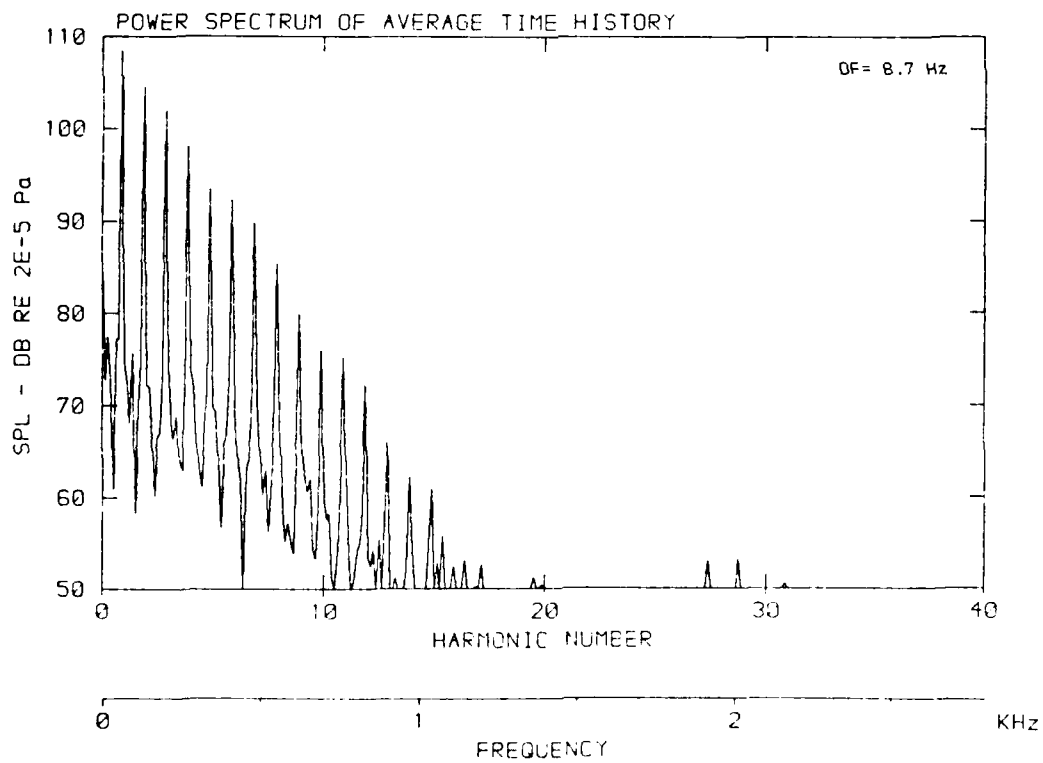
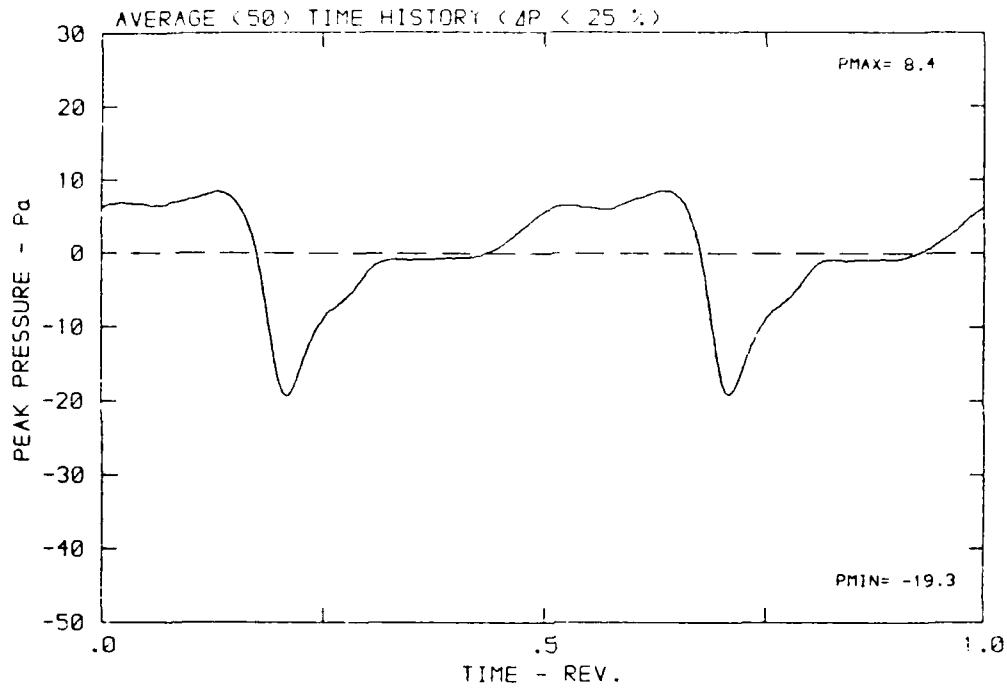
DATA POINT: EC-1 RUN: 130 MP: 2

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



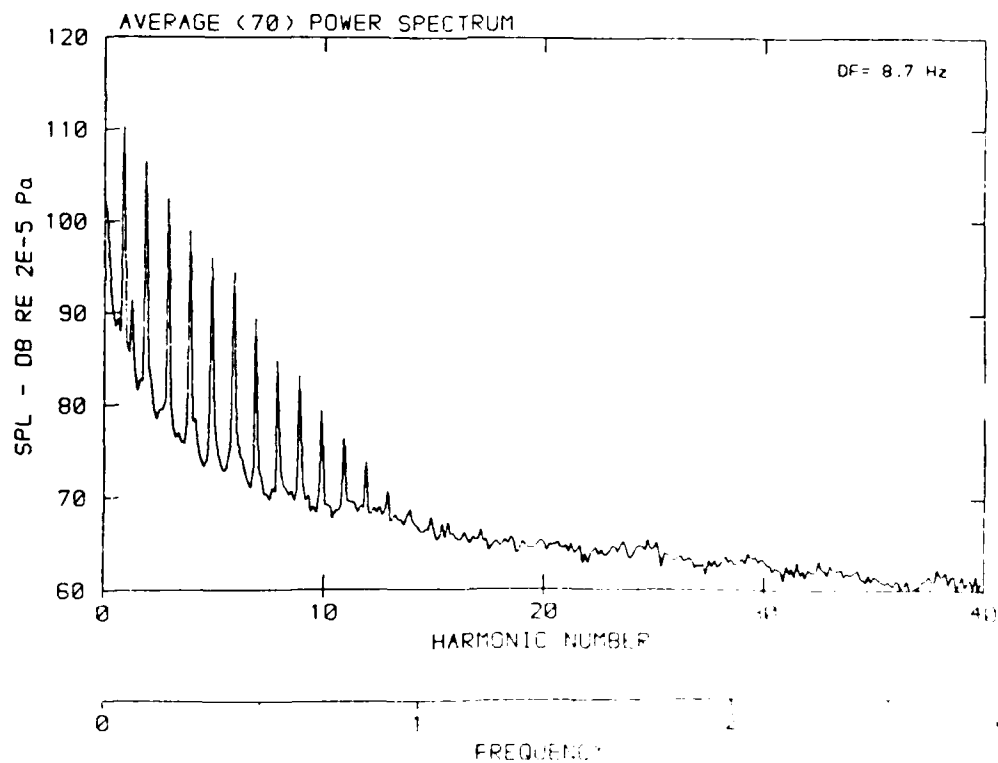
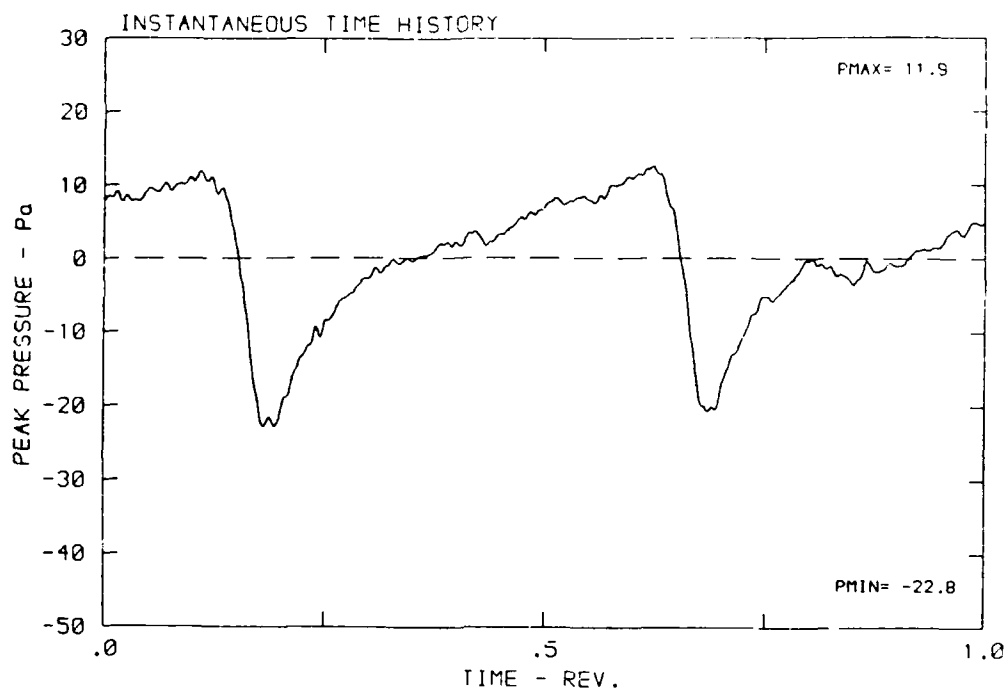
DATA POINT: EC-1 RUN: 130 MP: 2

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



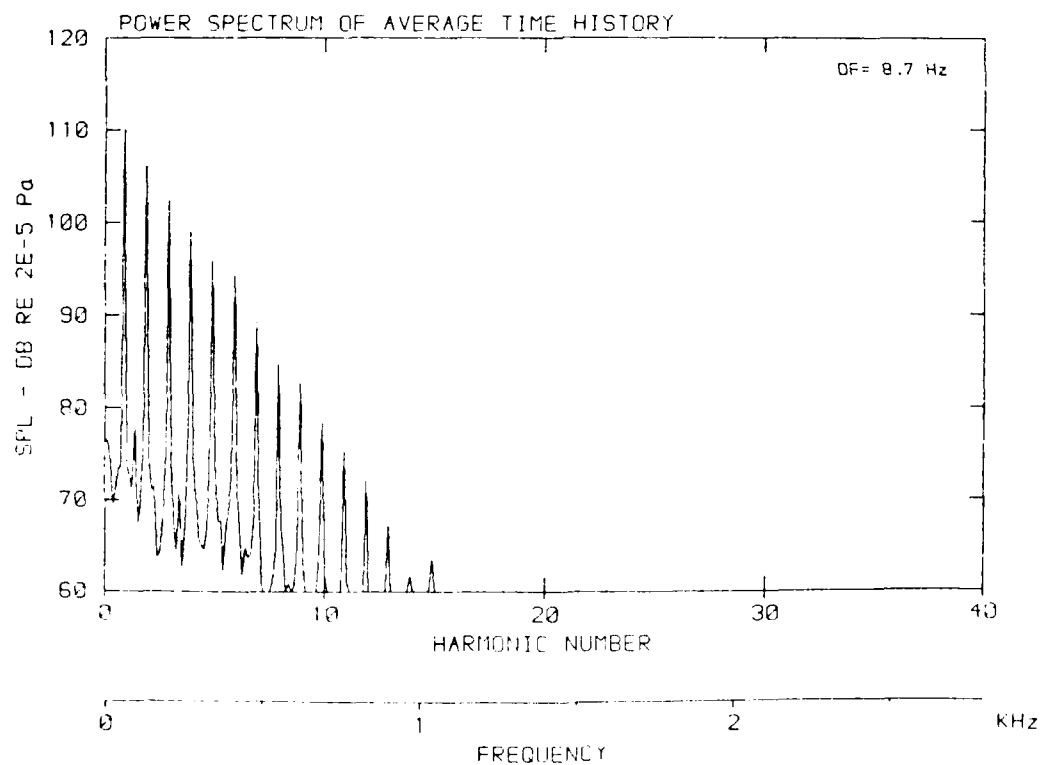
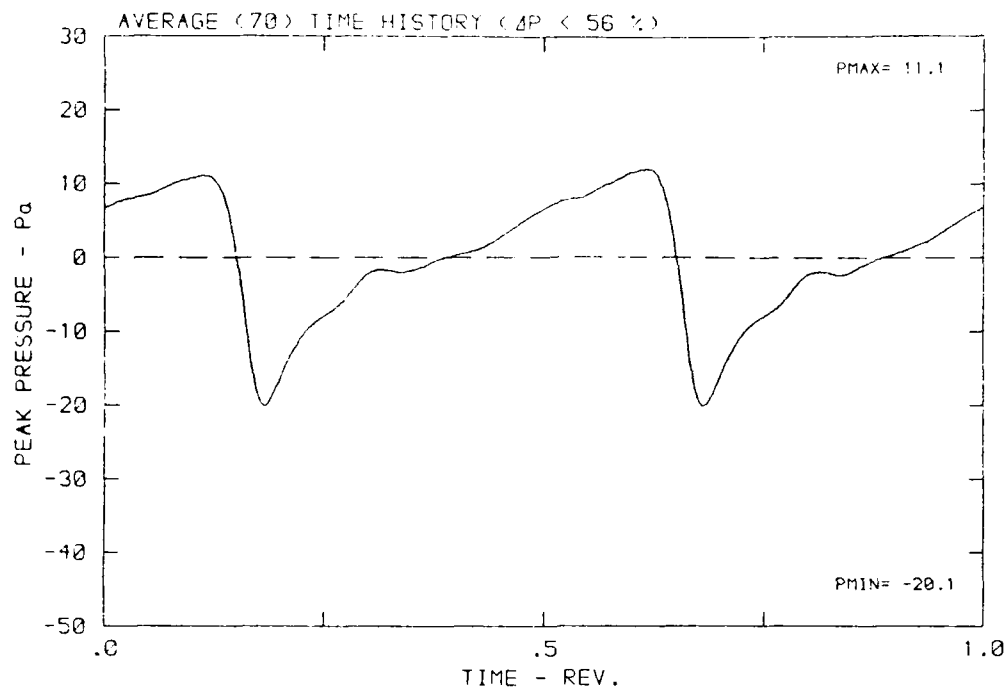
DATA POINT: EC-1 RUN: 130 MP: 3

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



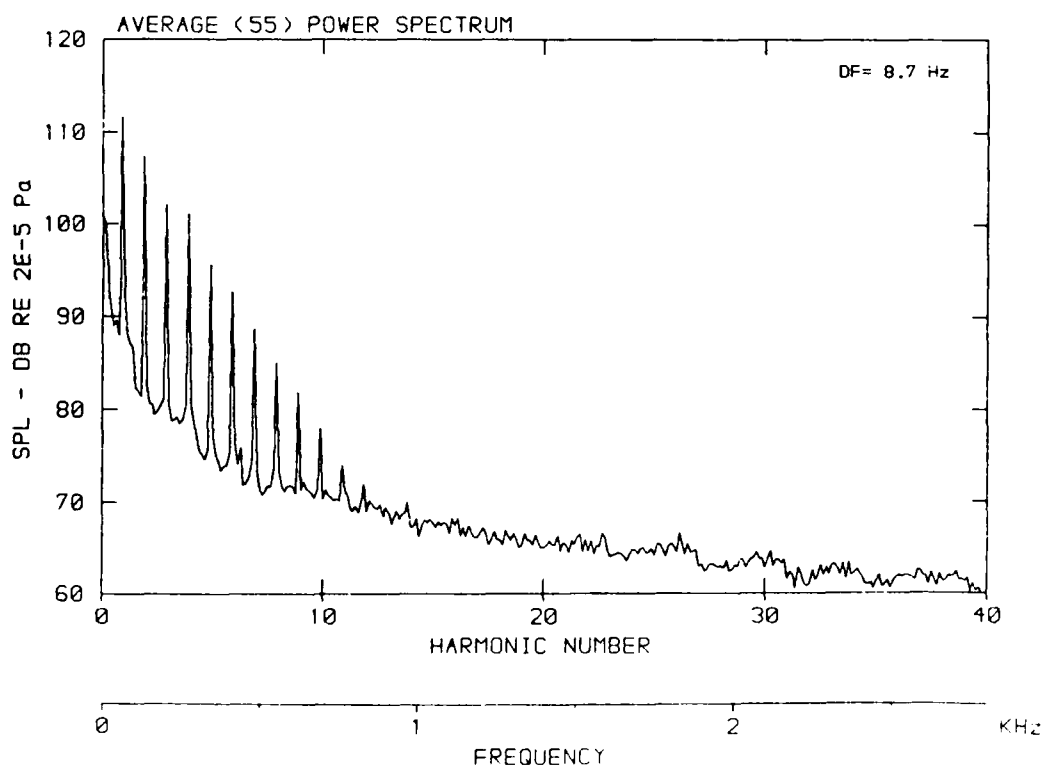
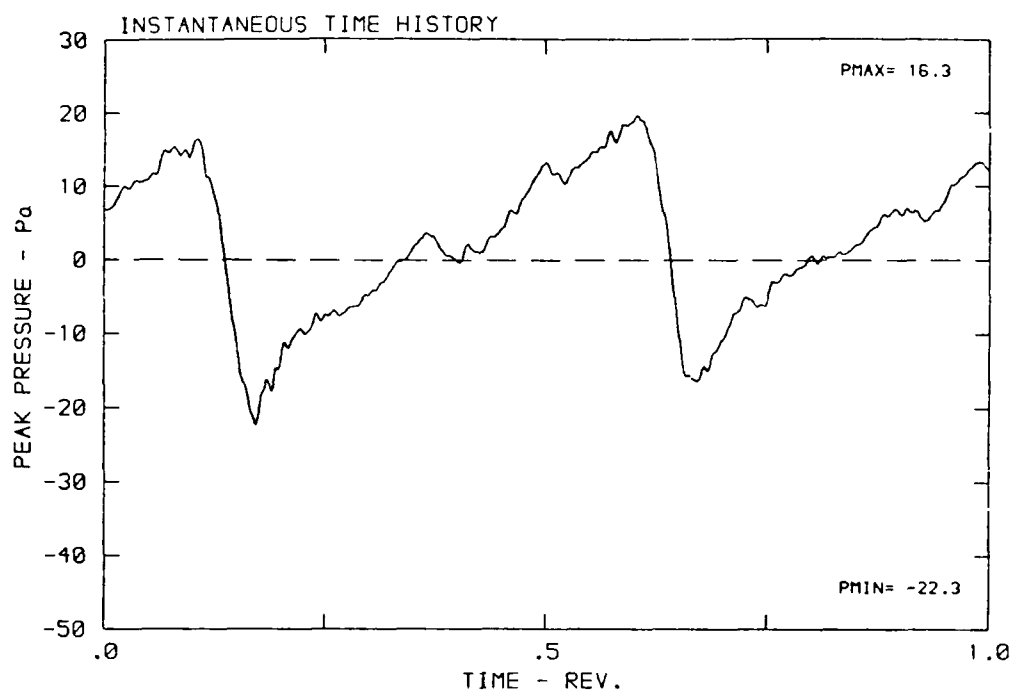
DATA POINT: EC-1 RUN: 130 MP: 3

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



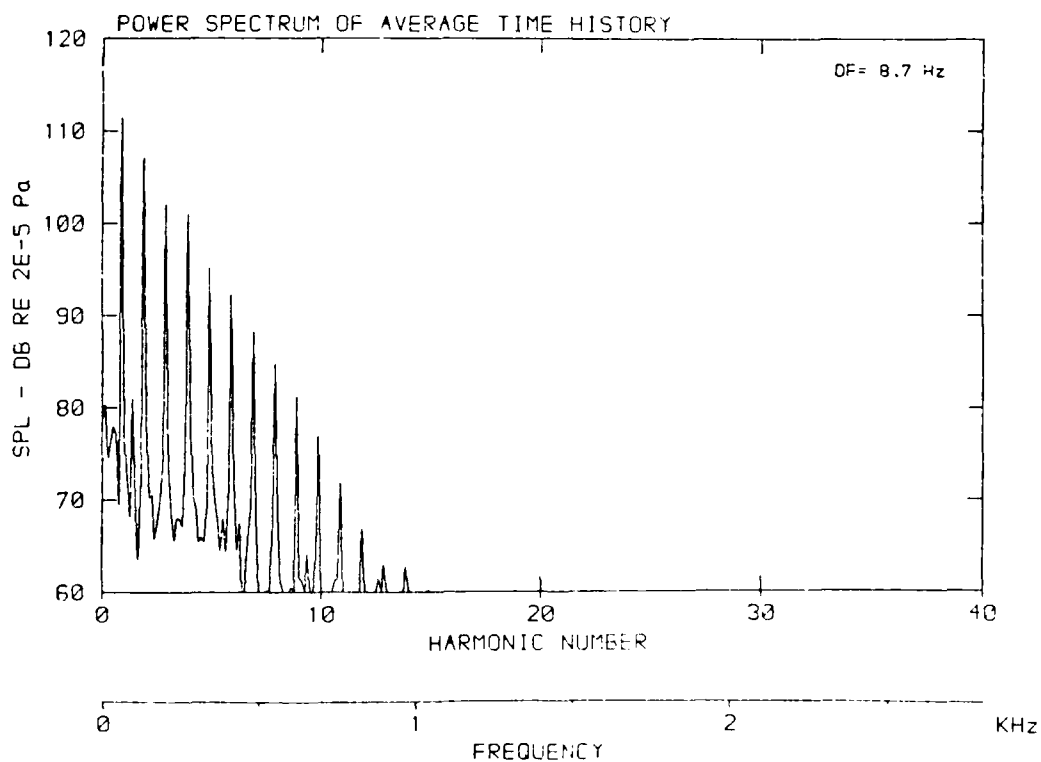
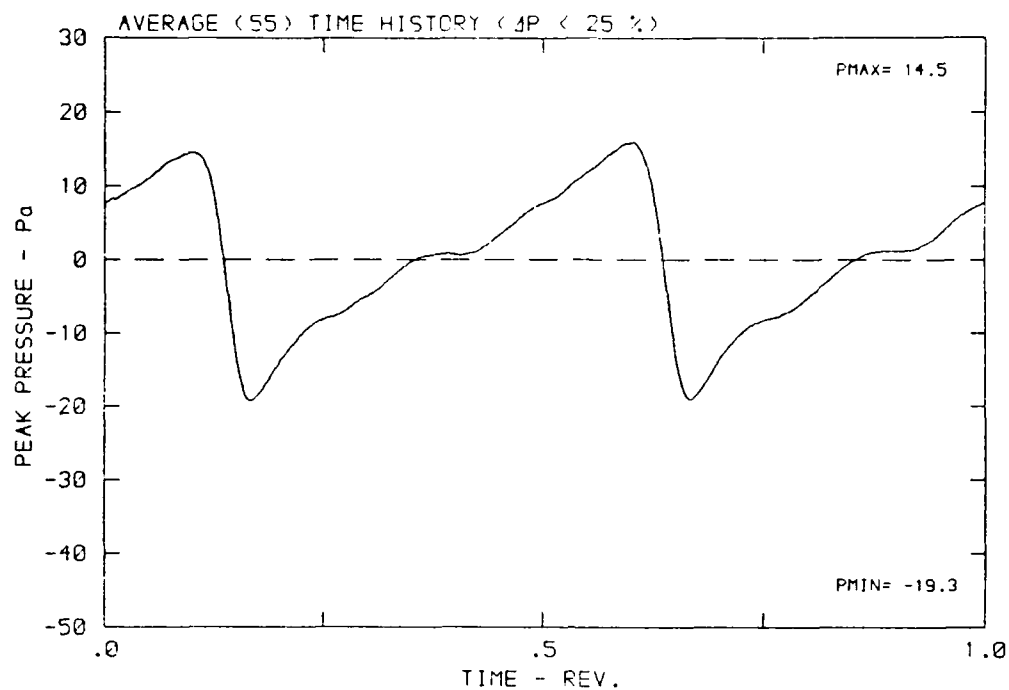
DATA POINT: EC-1 RUN: 130 MP: 4

β : 20.7° mH : .6752 n : 2100 rpm v/u : .231 ϕ : 7.3° T : 287.0 K



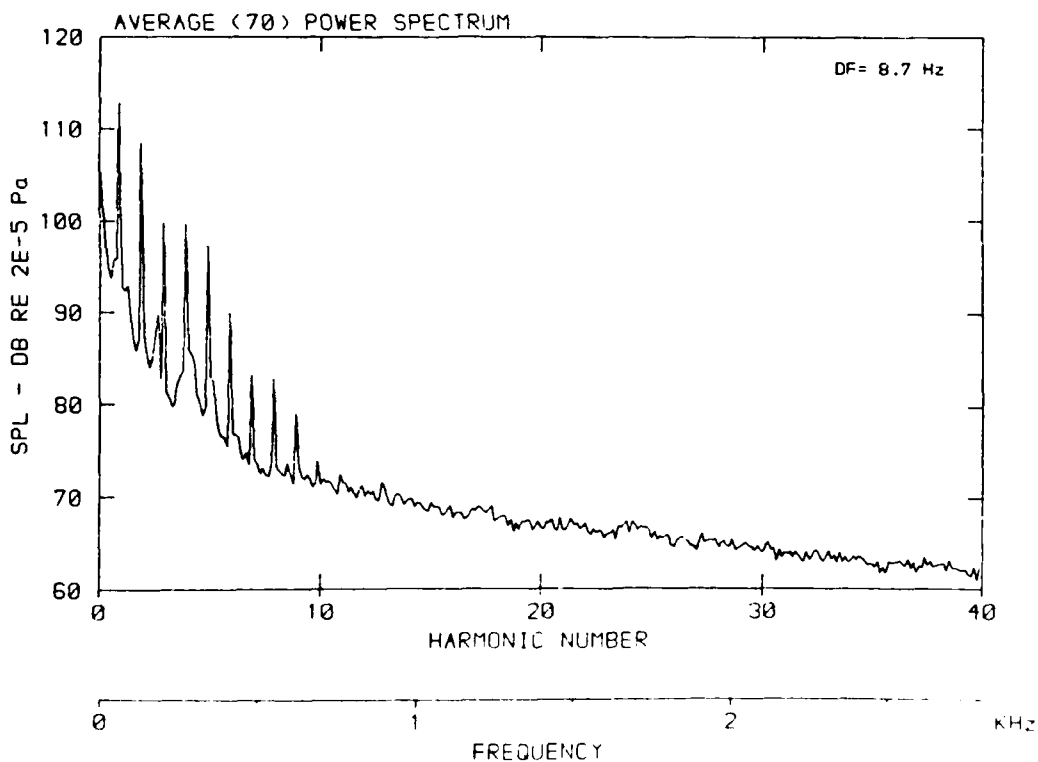
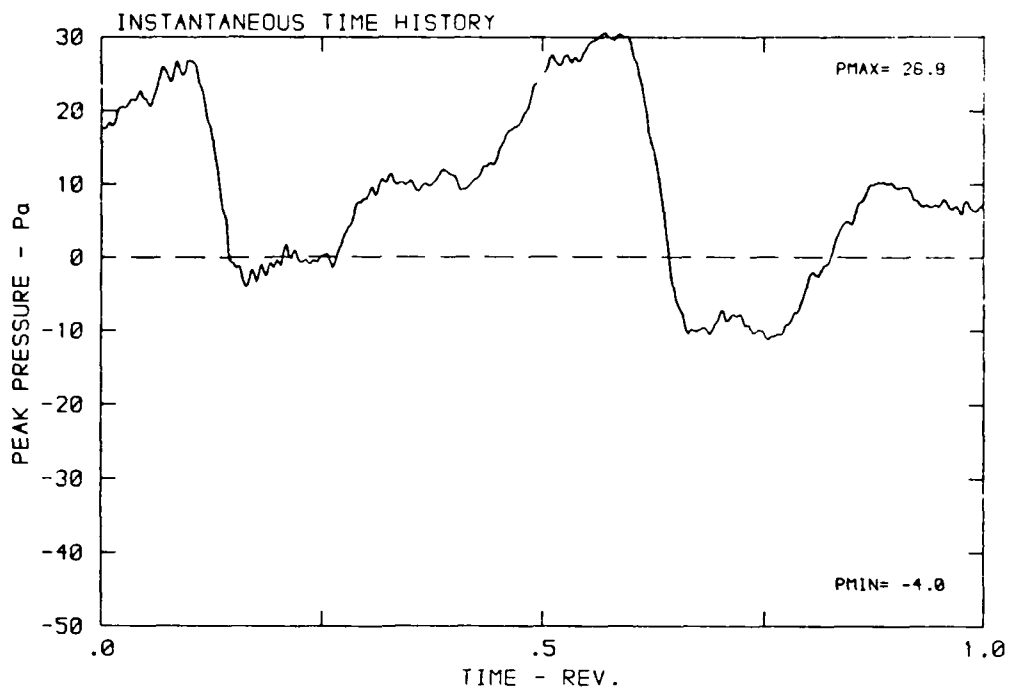
DATA POINT: EC-1 RUN: 130 MP: 4

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



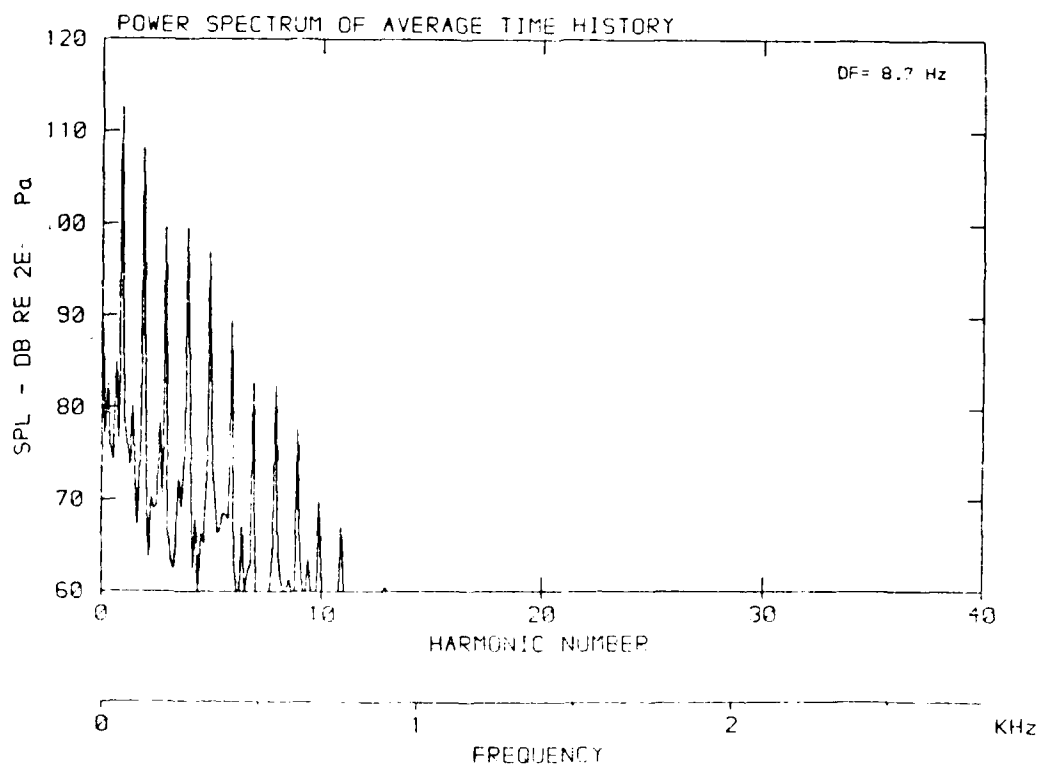
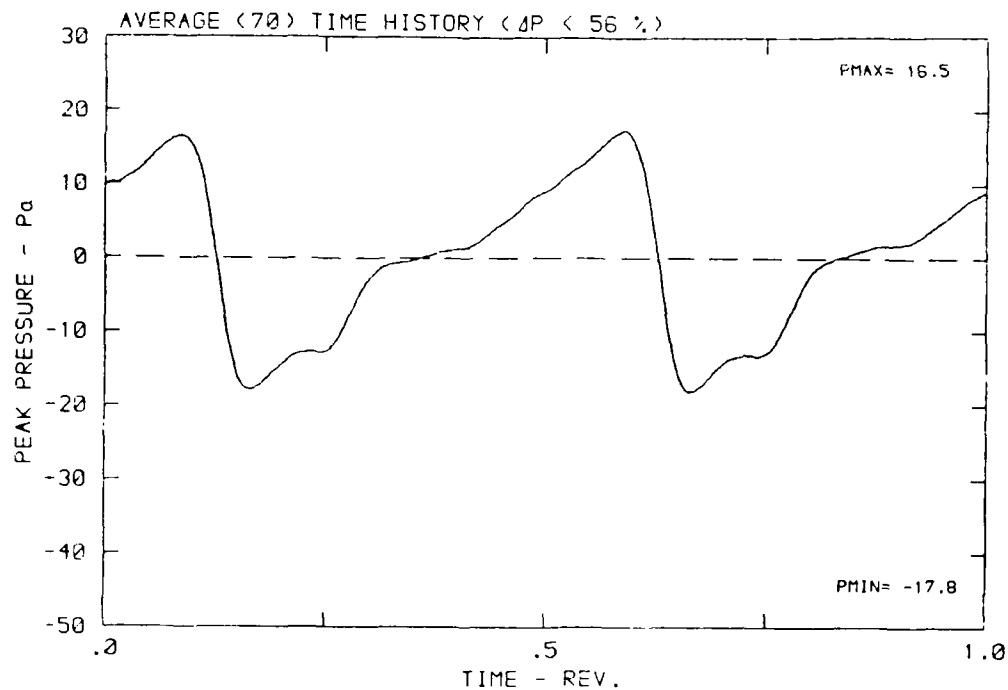
DATA POINT: EC-1 RUN: 130 MP: 5

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



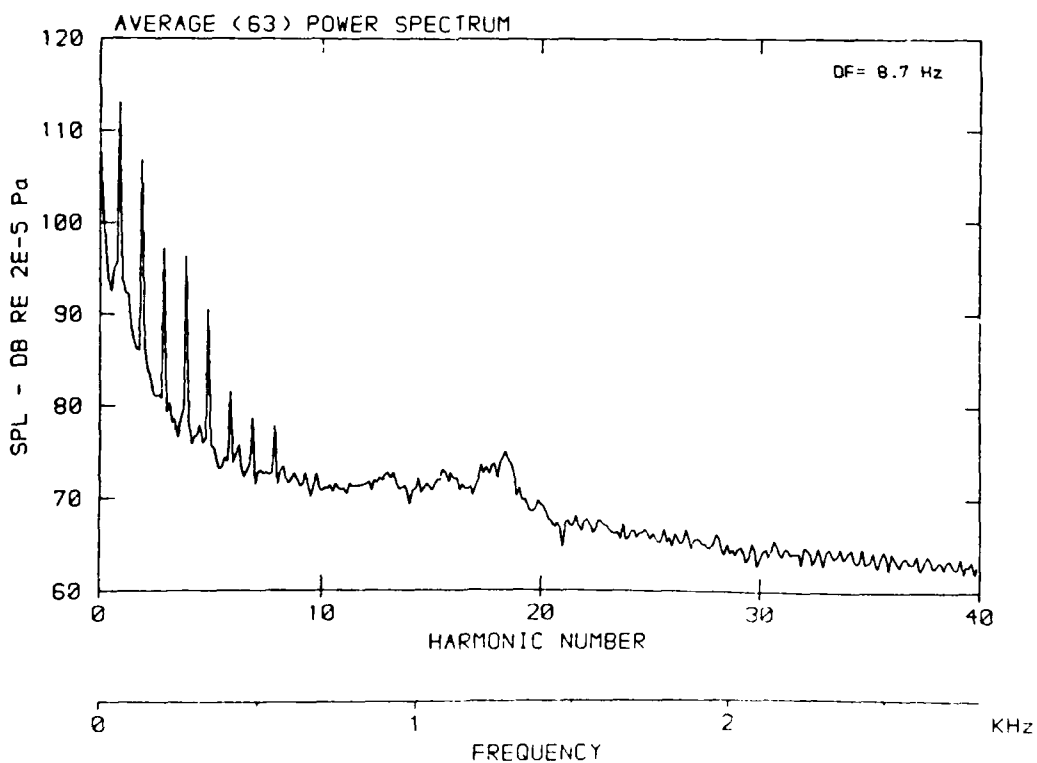
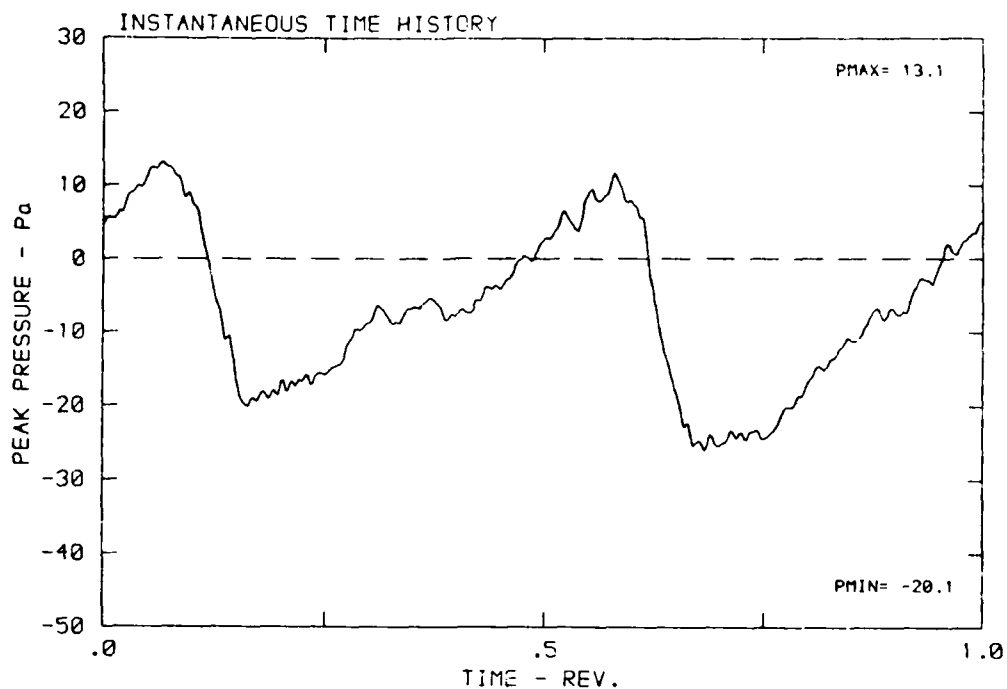
DATA POINT: EC-1 RUN: 130 MP: 5

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



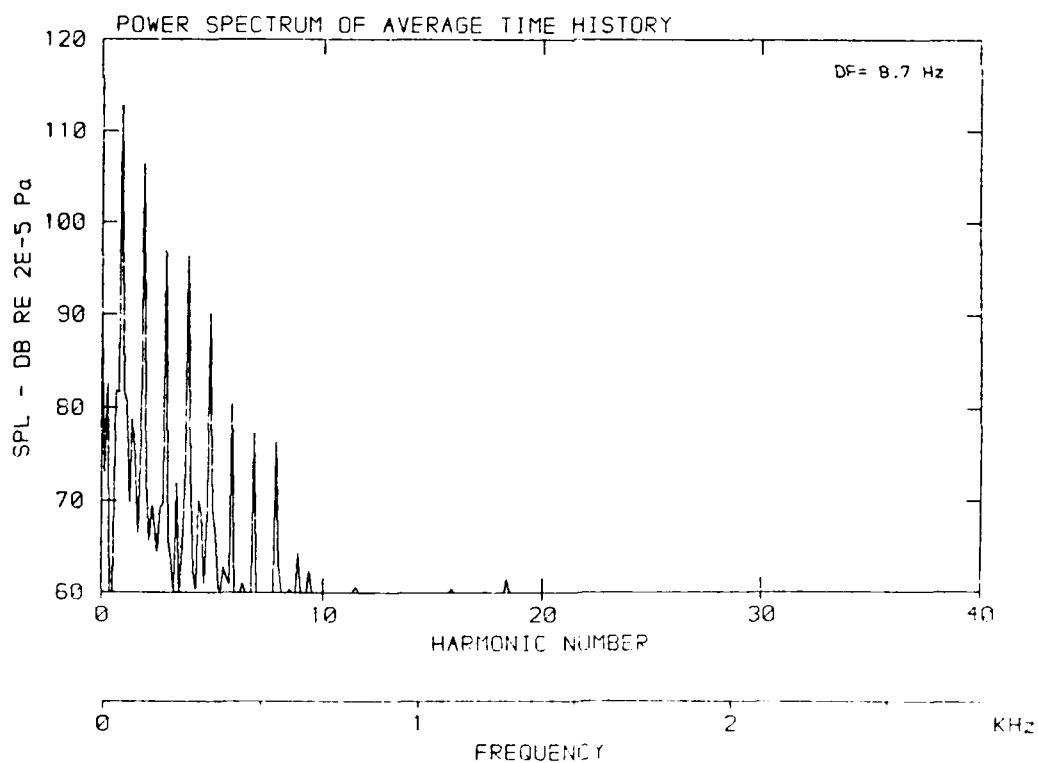
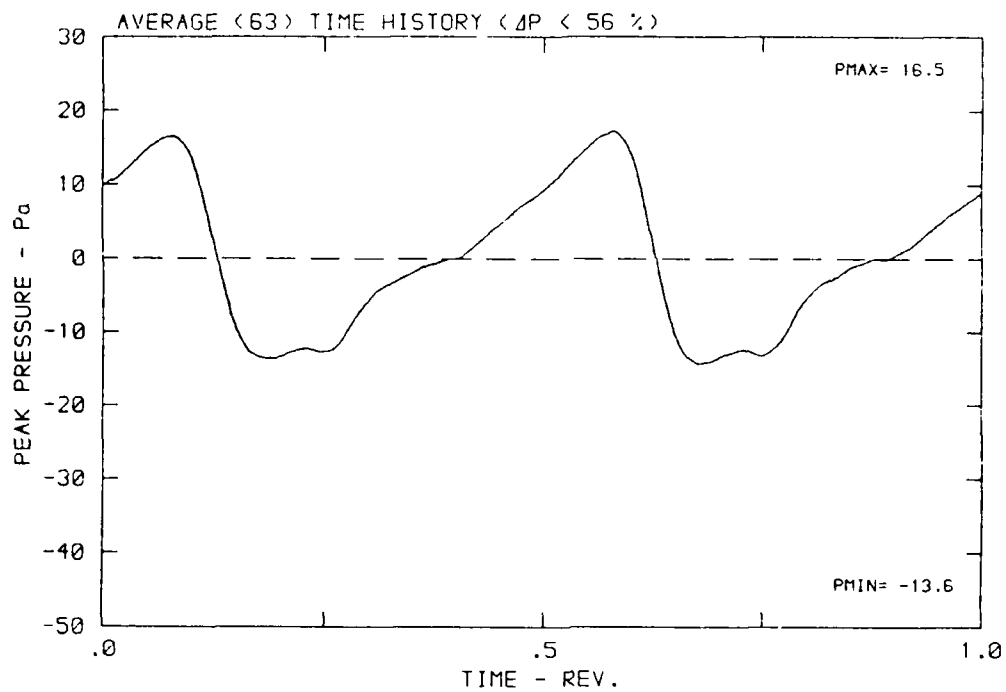
DATA POINT: EC-1 RUN: 130 MP: 6

β : 20.7° MH: .6752 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 287.0 K



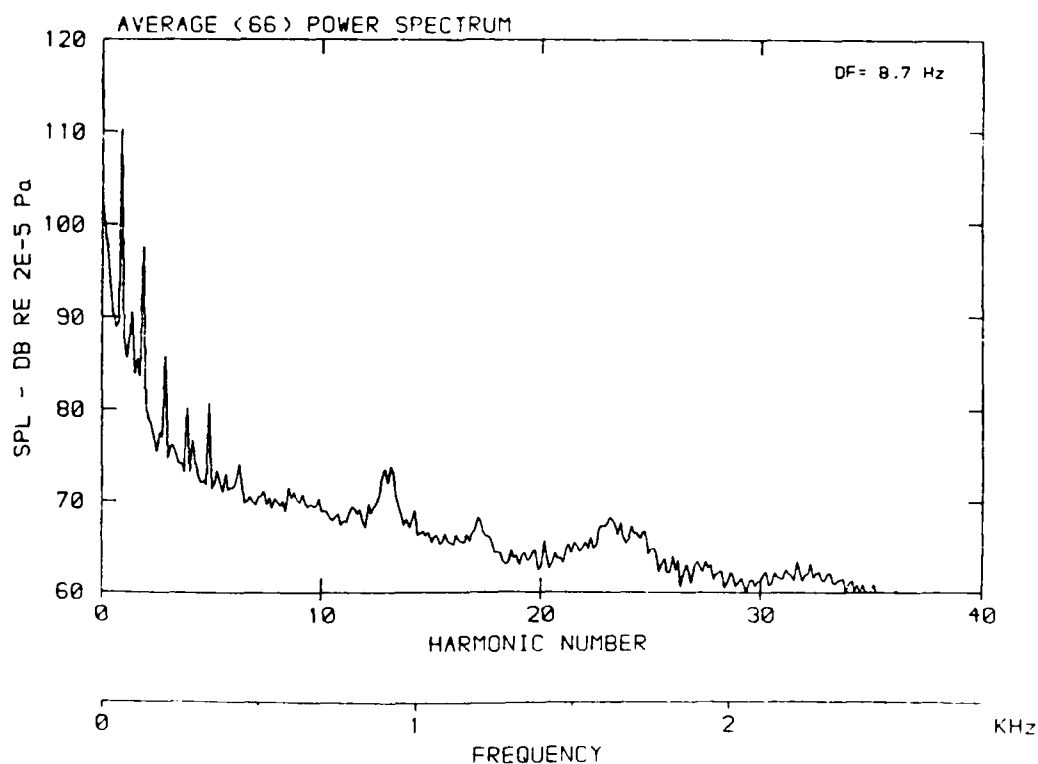
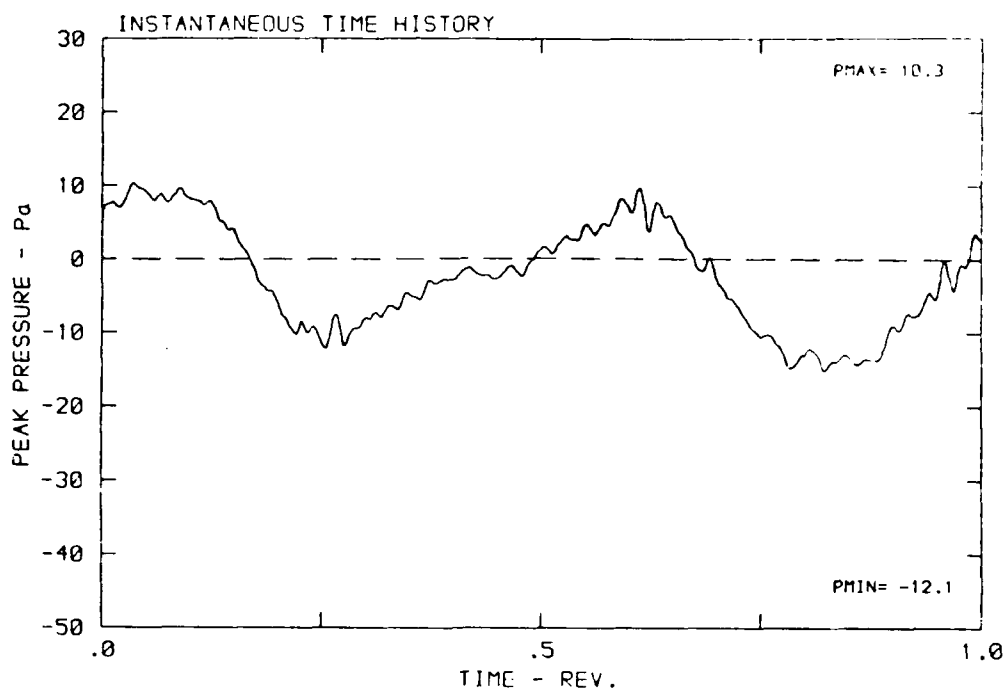
DATA POINT : EC-1 RUN : 130 MP : 6

β : 20.7° MH : .6752 n : 2100 rpm v/u : .231 ϕ : 7.3° T : 287.0 K



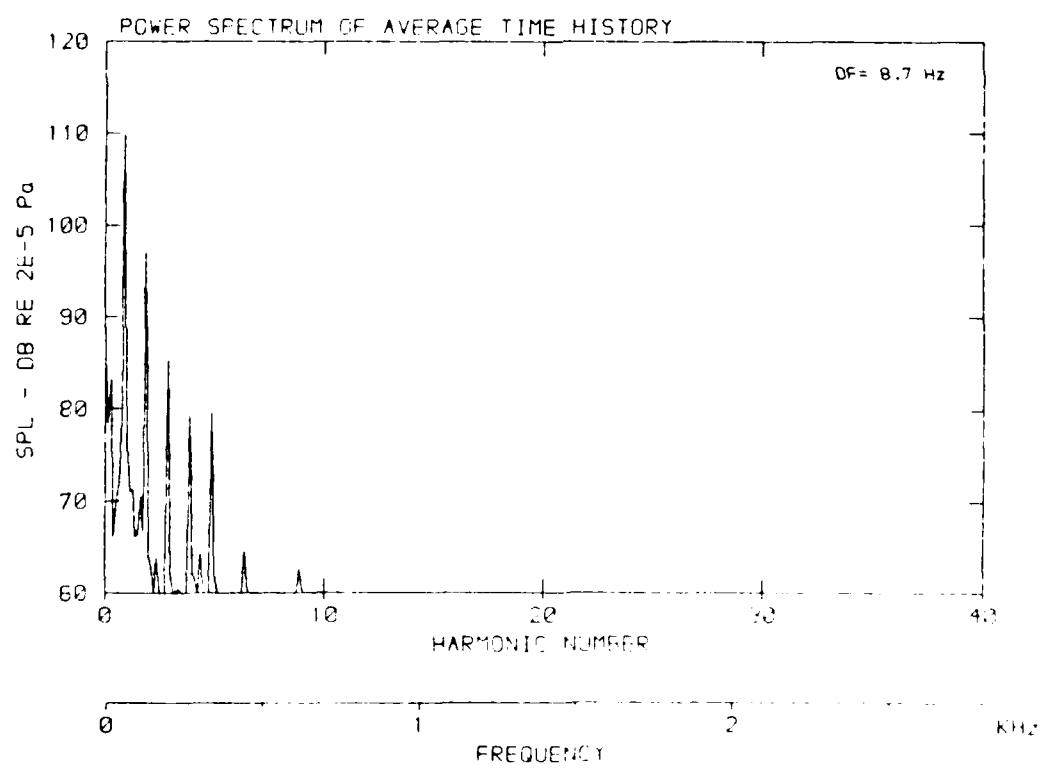
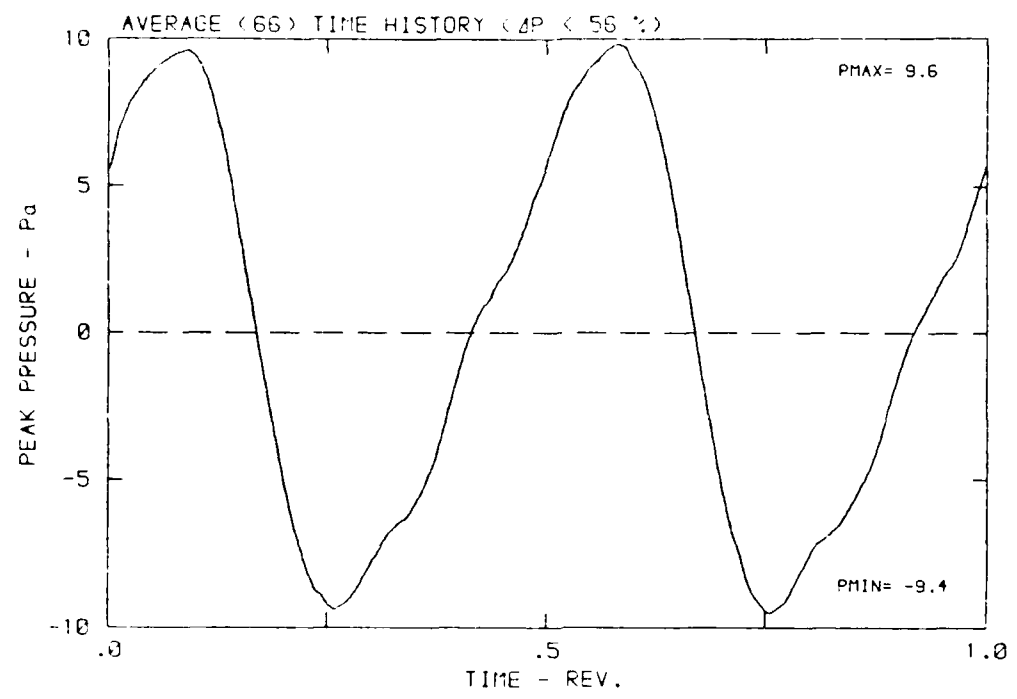
DATA POINT: EC-1 RUN: 130 MP: 7

β : 20.7° MH: .6752 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 287.0 K



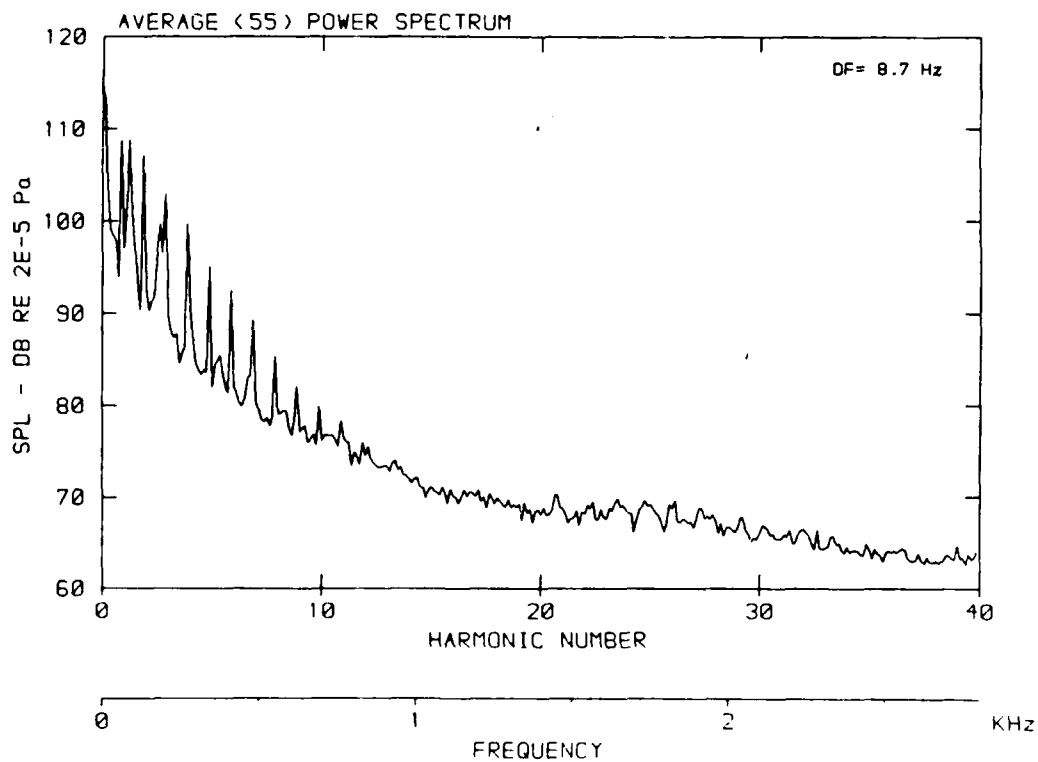
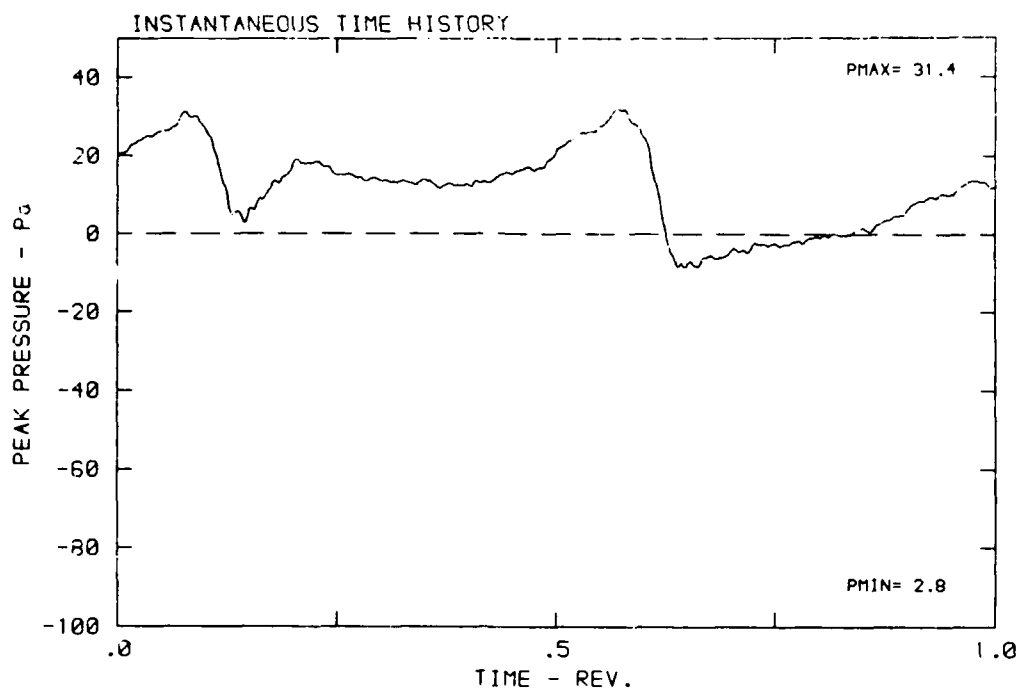
DATA POINT: EC-1 RUN: 130 MP: 7

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



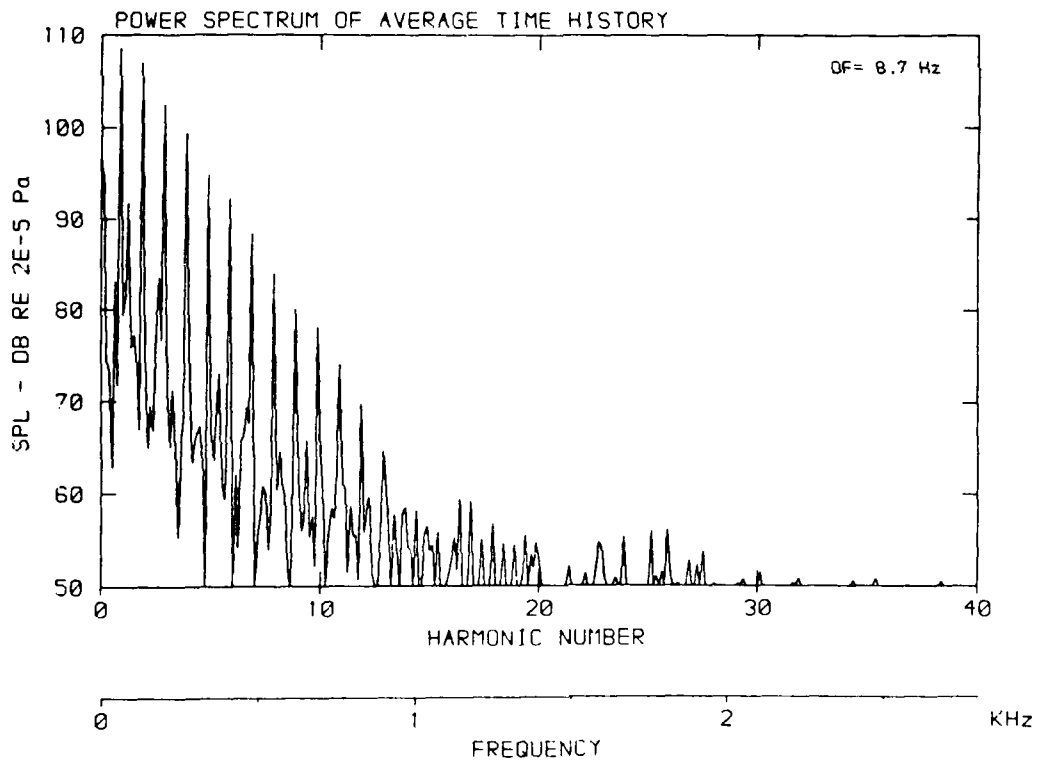
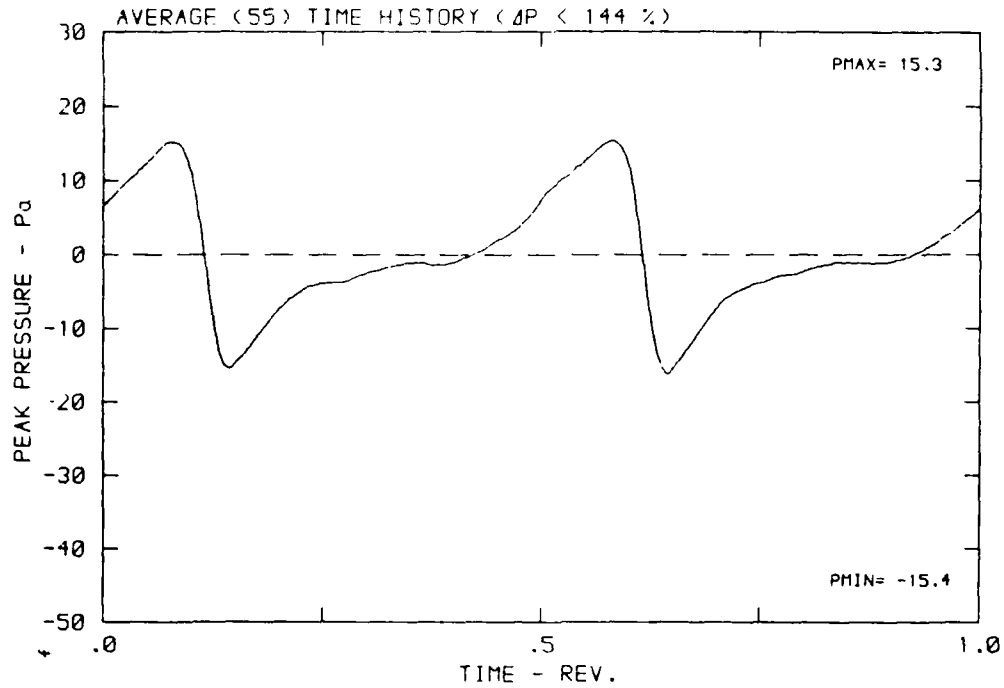
DATA POINT: EC-1 RUN: 130 MP: 8

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



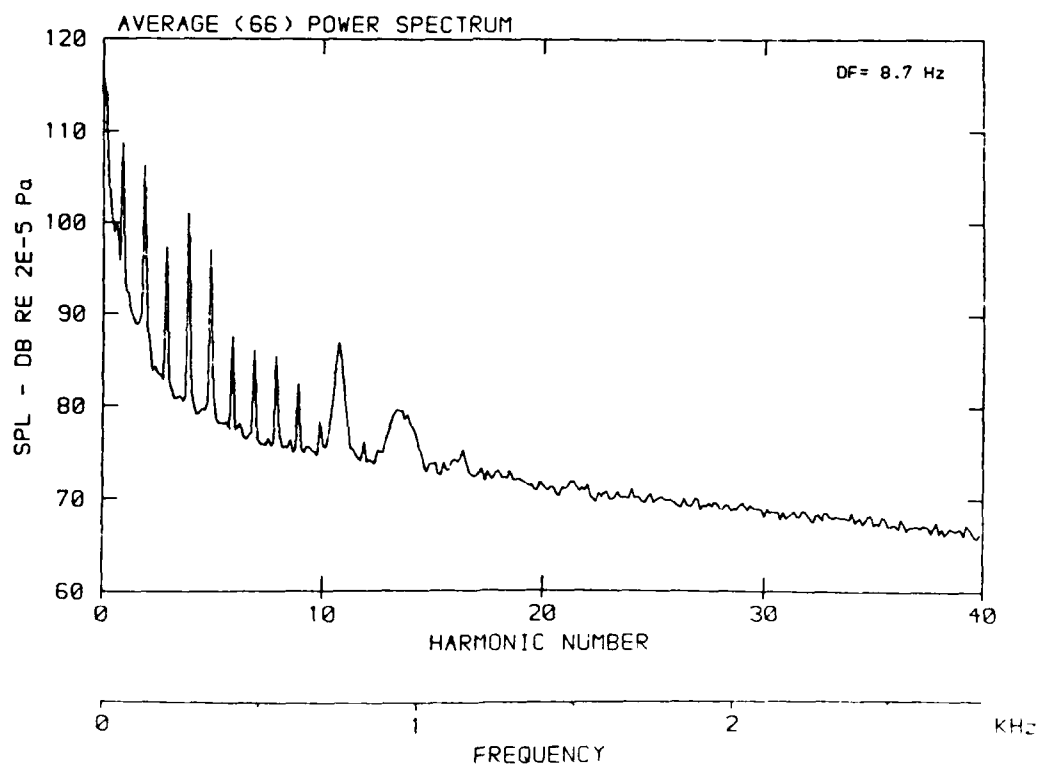
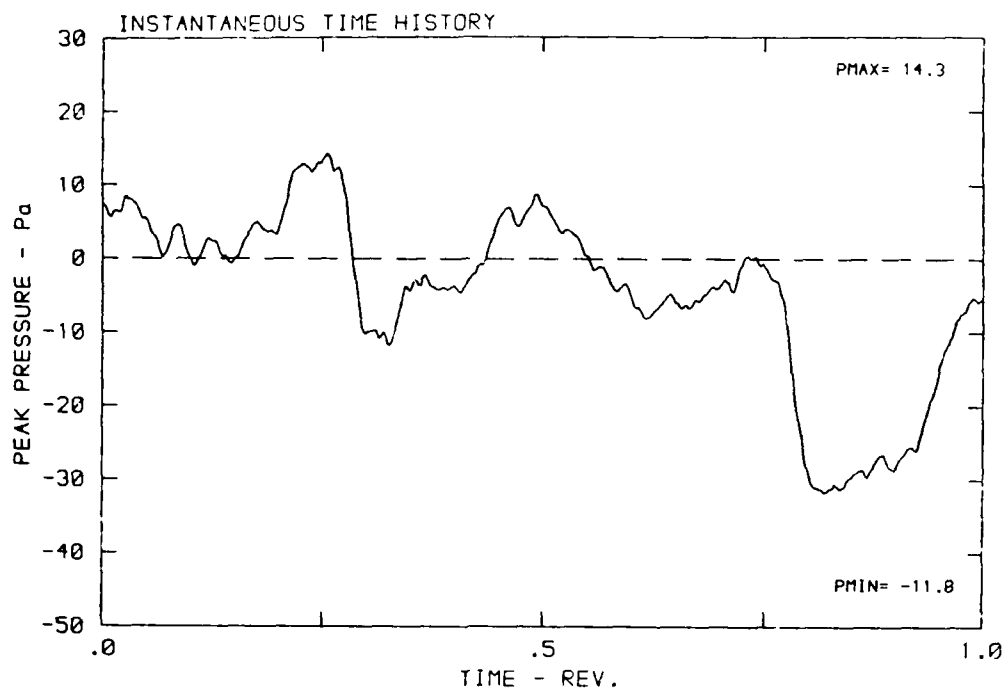
DATA POINT: EC-1 RUN: 130 MP: 8

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



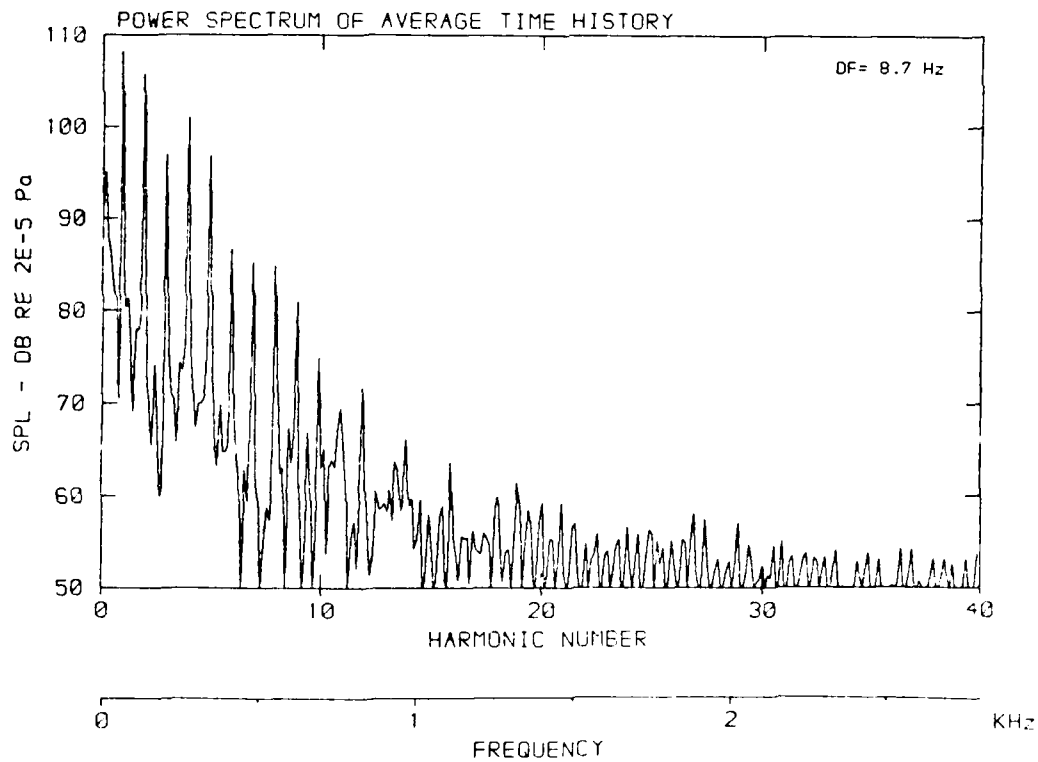
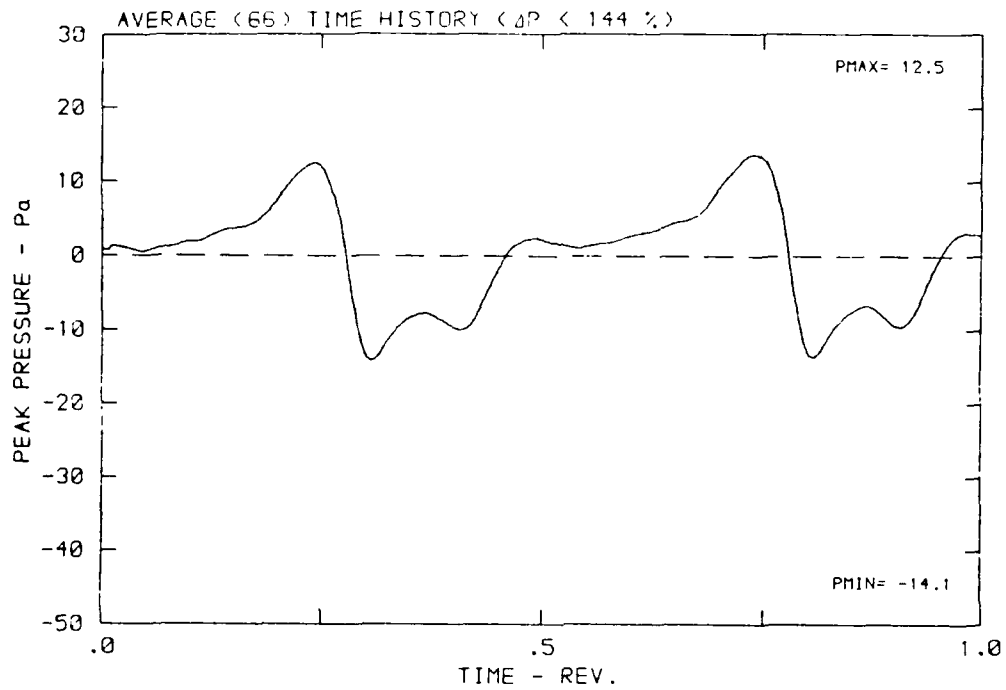
DATA POINT: EC-1 RUN: 130 MP: 9

β : 20.7° MH: .6752 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 287.0 K



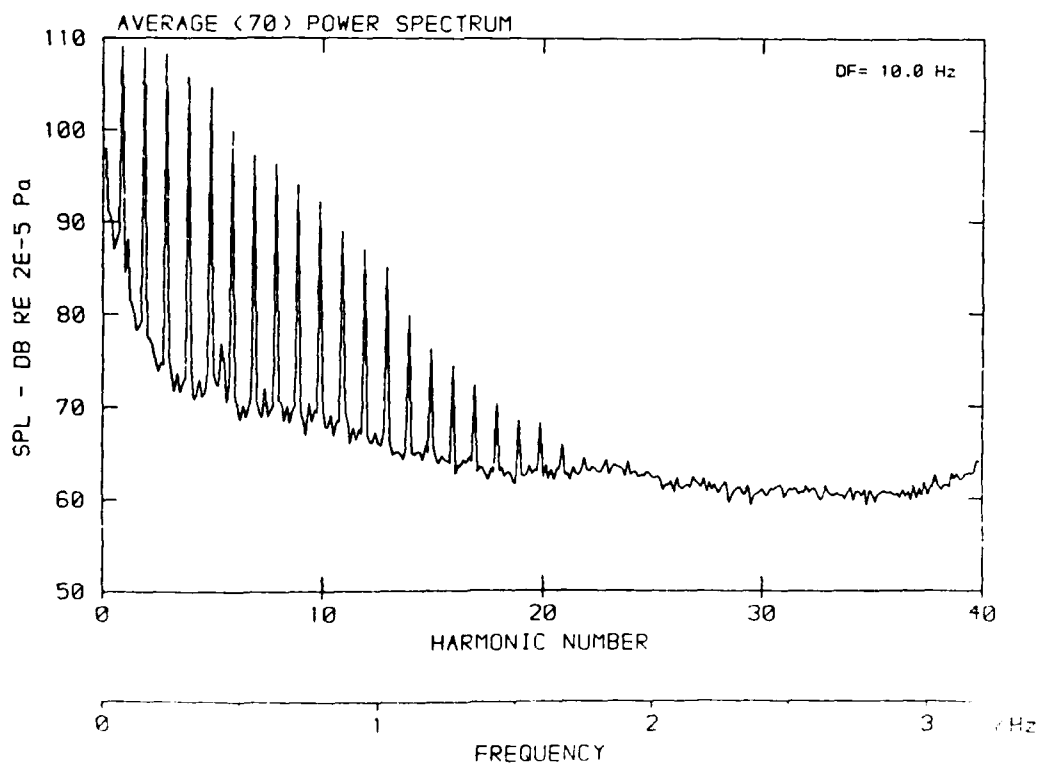
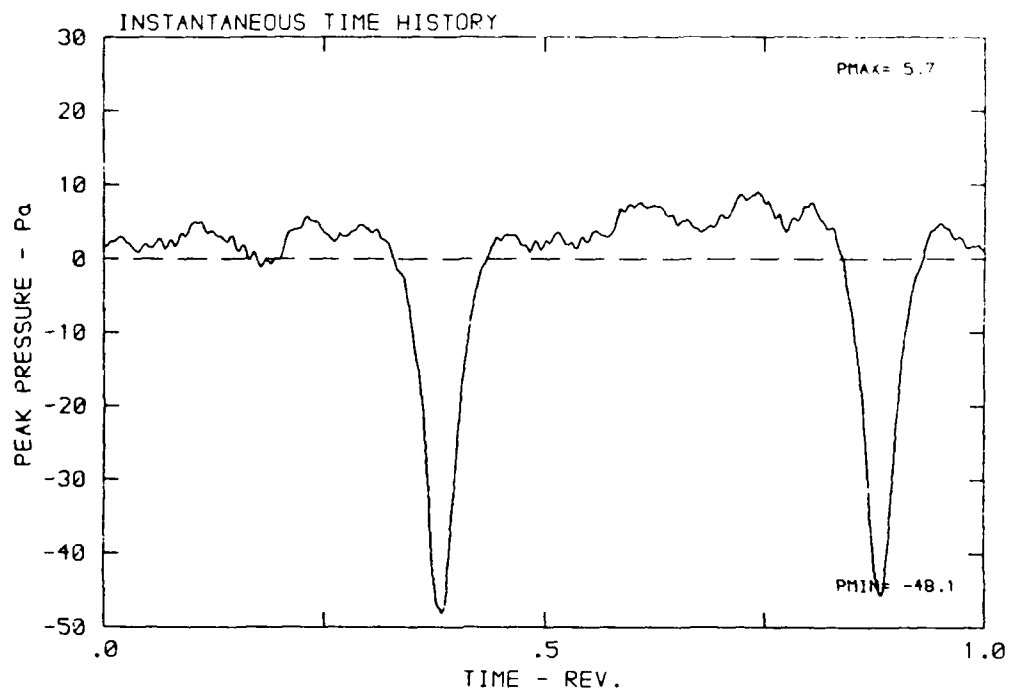
DATA POINT: EC-1 RUN: 130 MP: 9

β : 20.7° MH: .6752 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 287.0 K



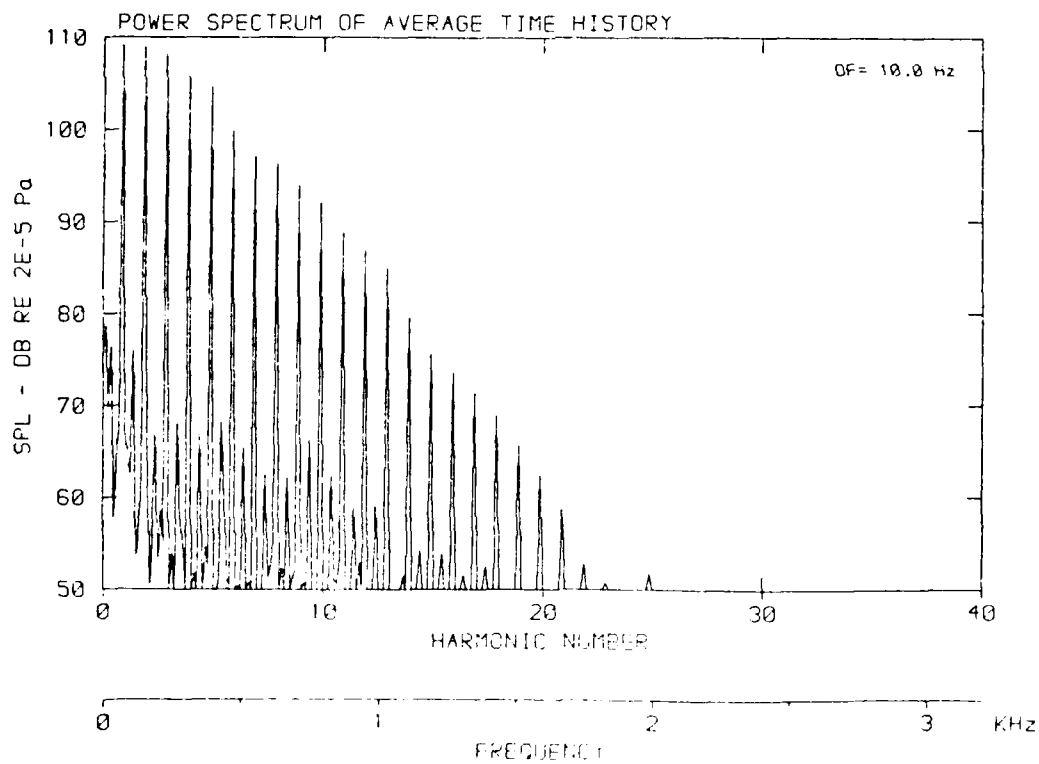
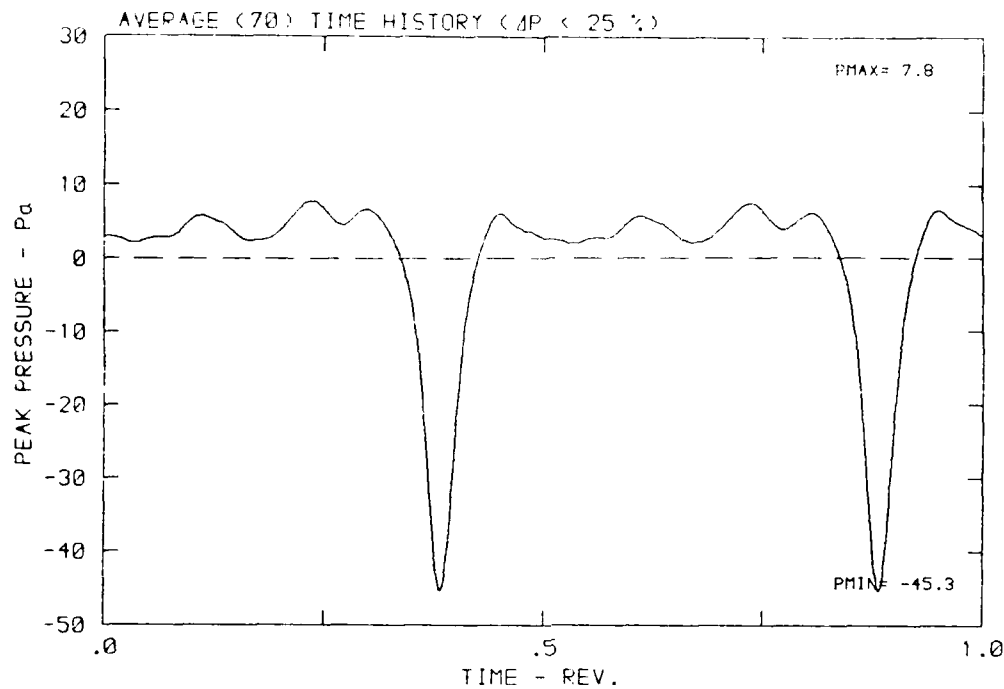
DATA POINT: EC-2 RUN: 131 MP: 1

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 187.4



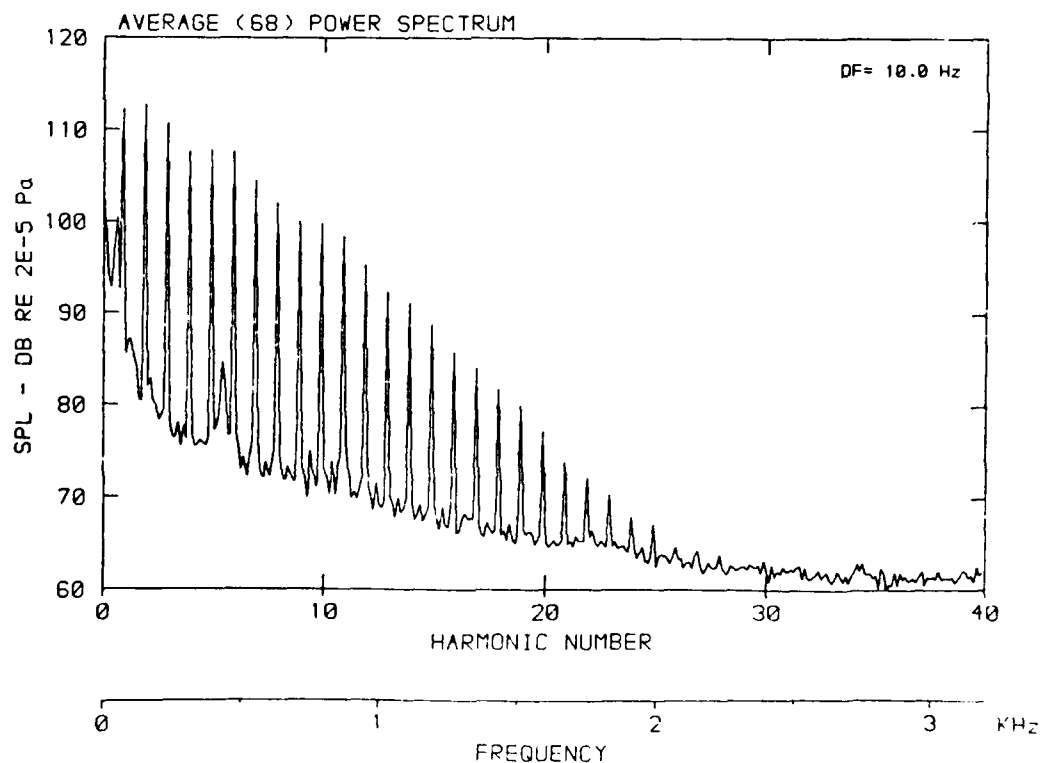
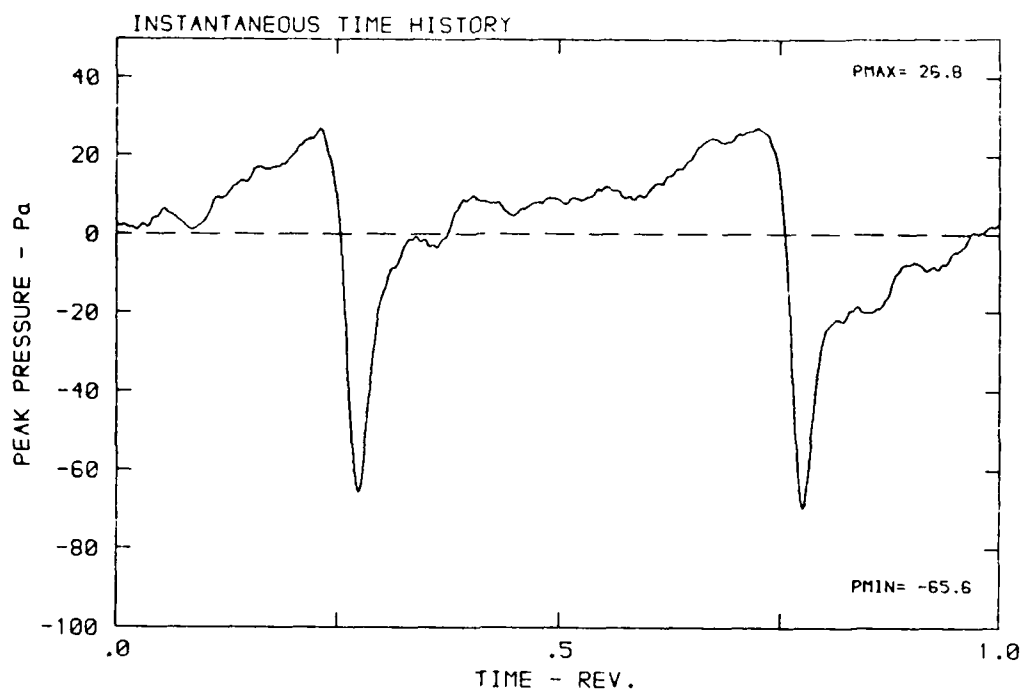
DATA POINT: EC-2 RUN: 131 MP: 1

β : 20.7° MH: .7666 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



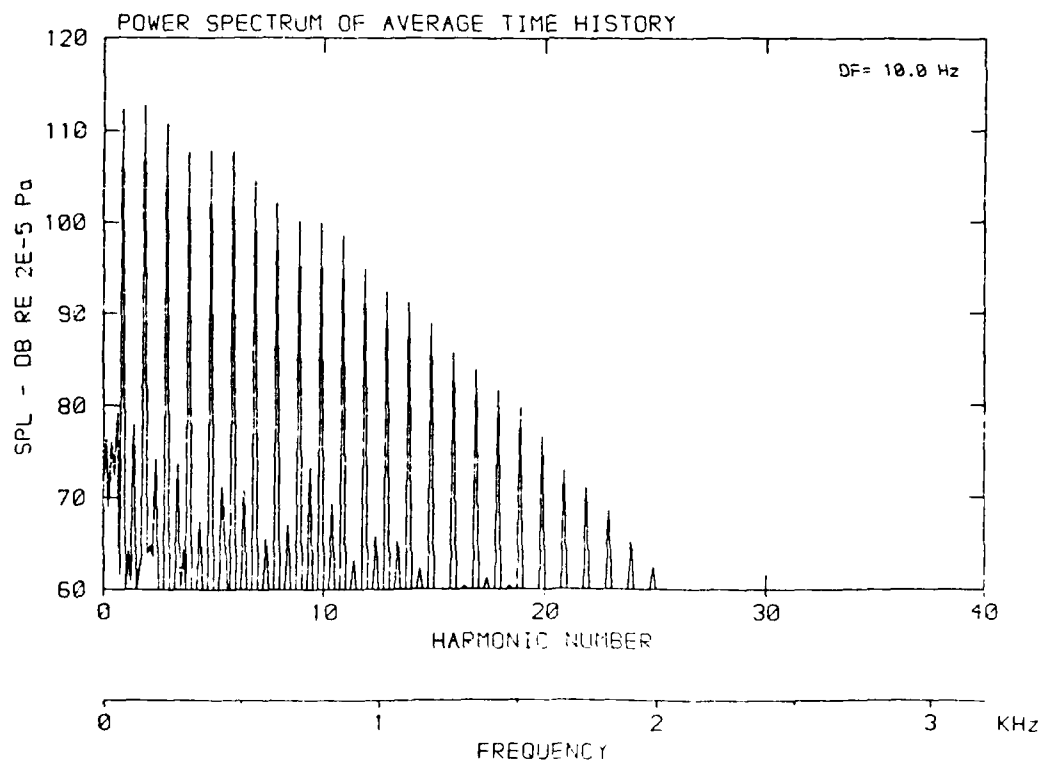
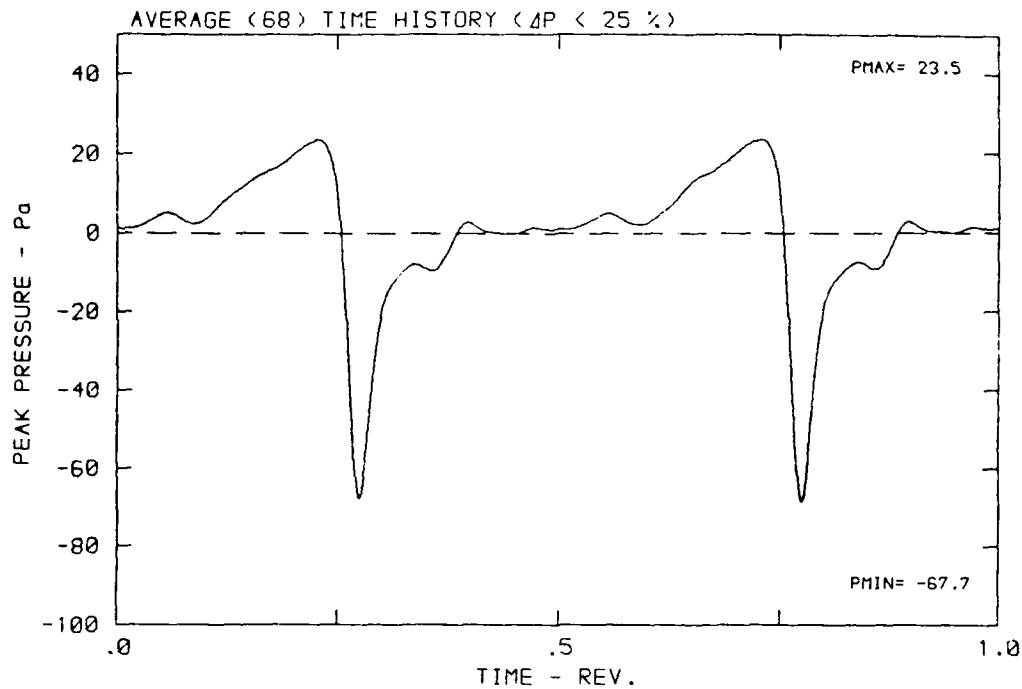
DATA POINT: EC-2 RUN: 131 MP: 2

β : 20.7° MH: .7666 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



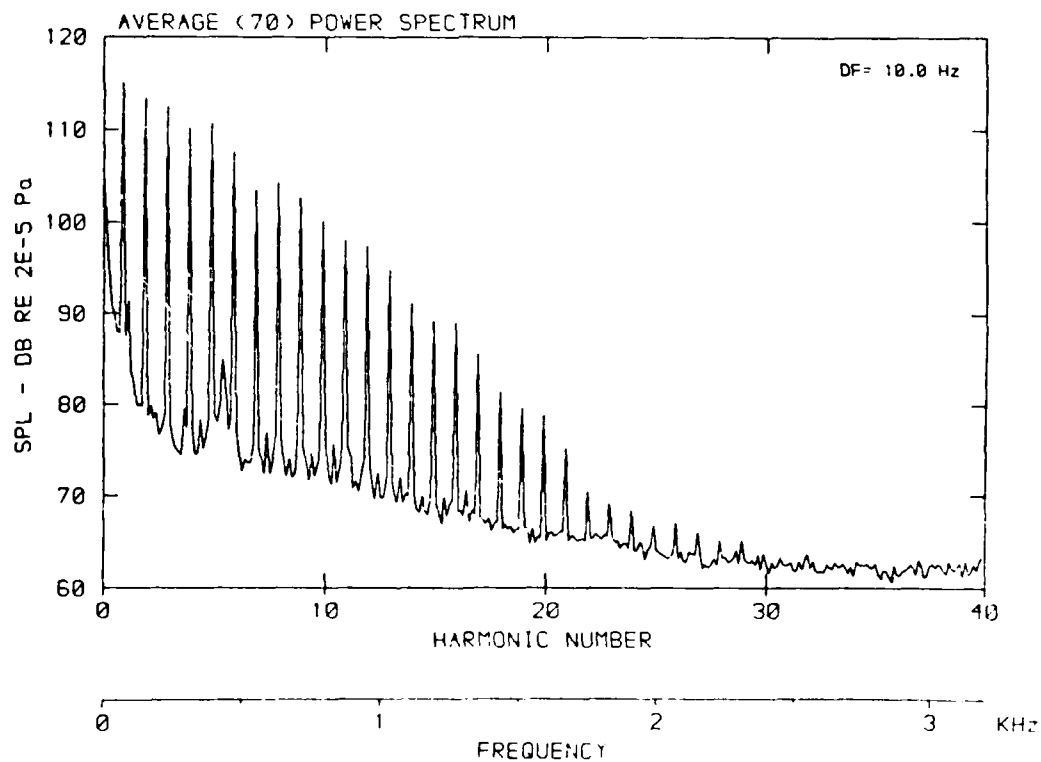
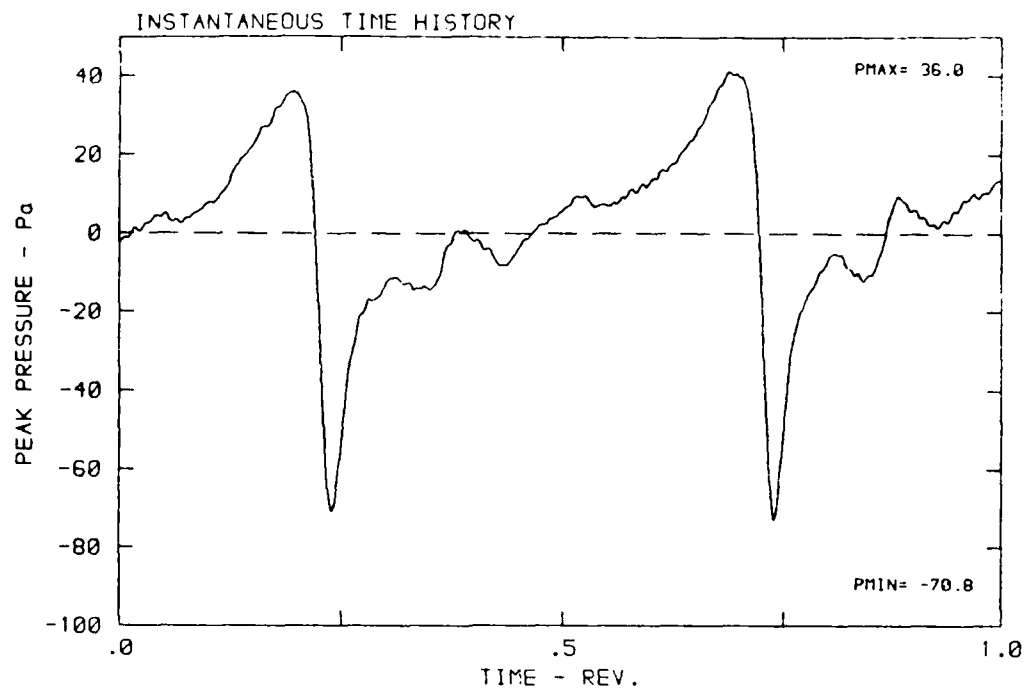
DATA POINT: EC-2 RUN: 131 MP: 2

β : 20.7° MH: .7666 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



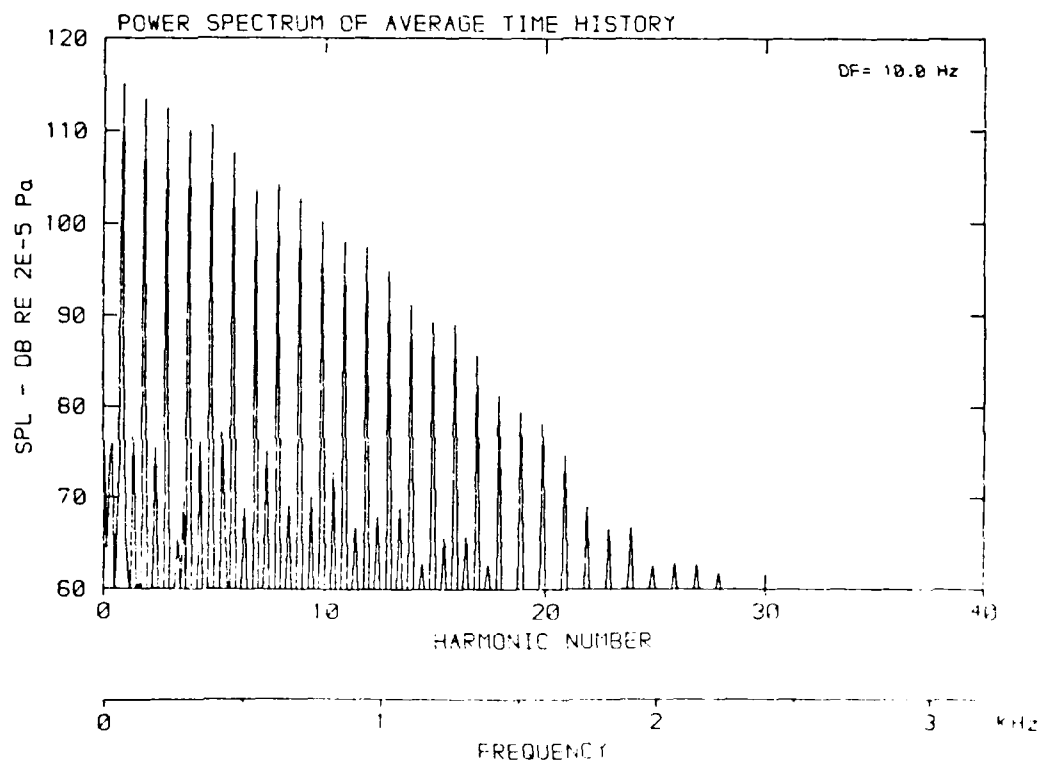
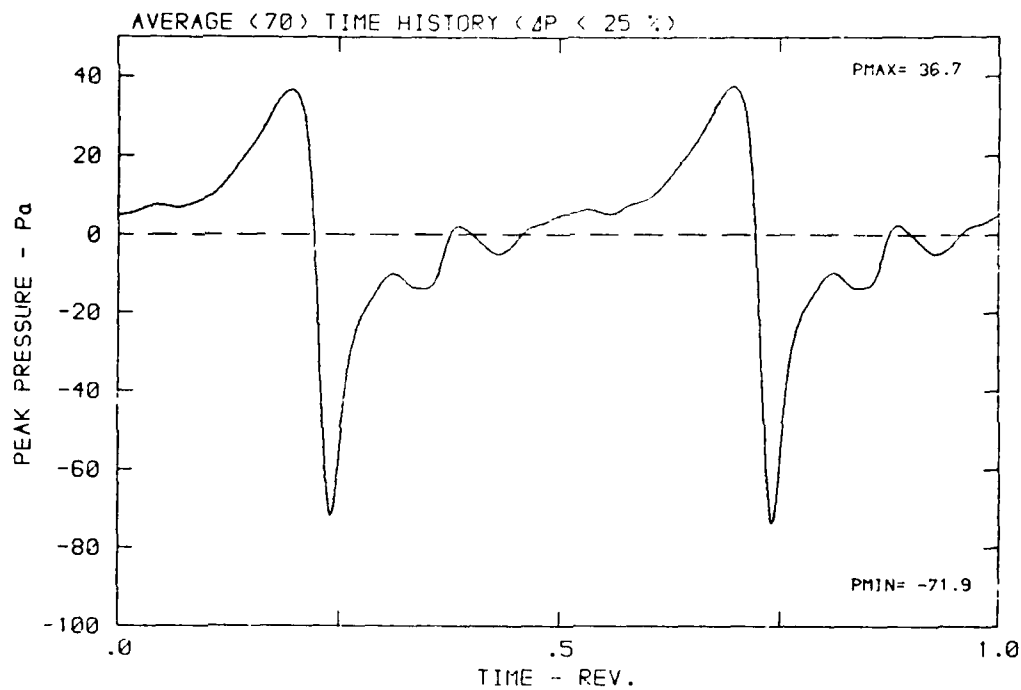
DATA POINT: EC-2 RUN: 131 MP: 3

β : 20.7° MH: .7666 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



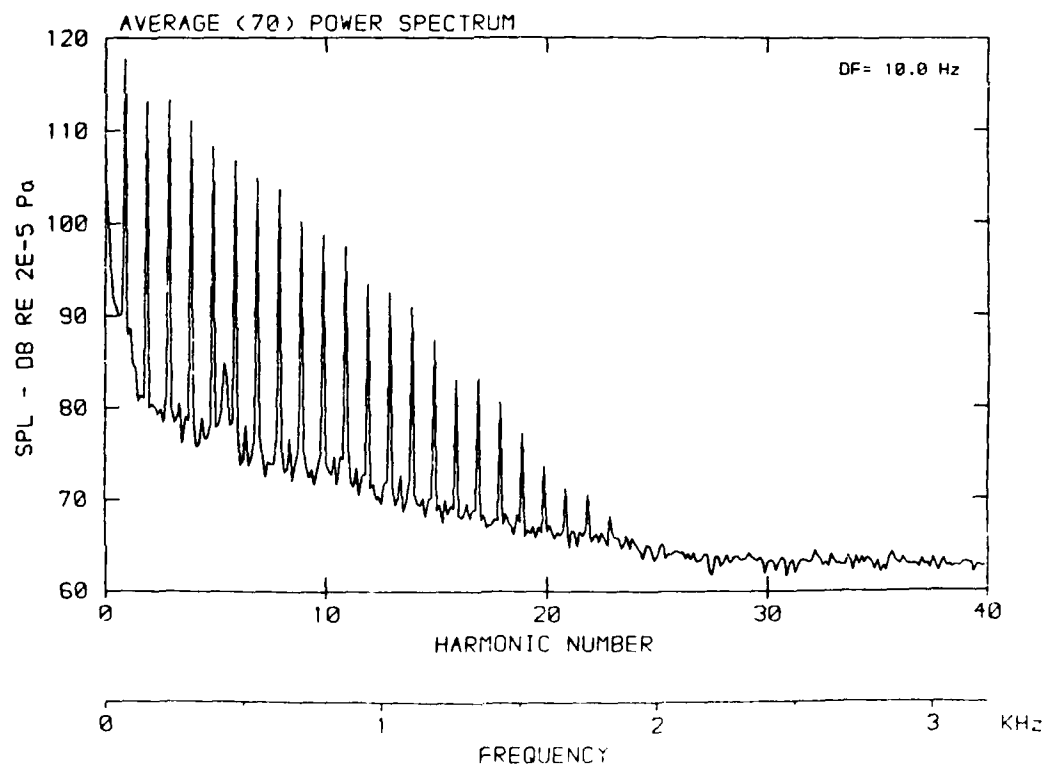
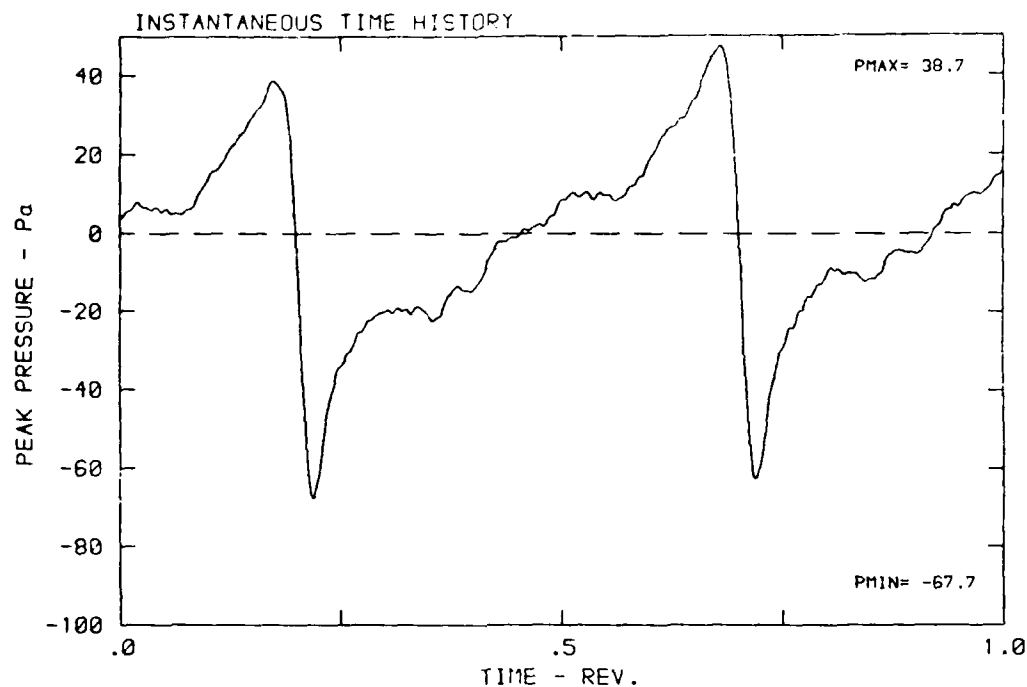
DATA POINT: EC-2 RUN: 131 MP: 3

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



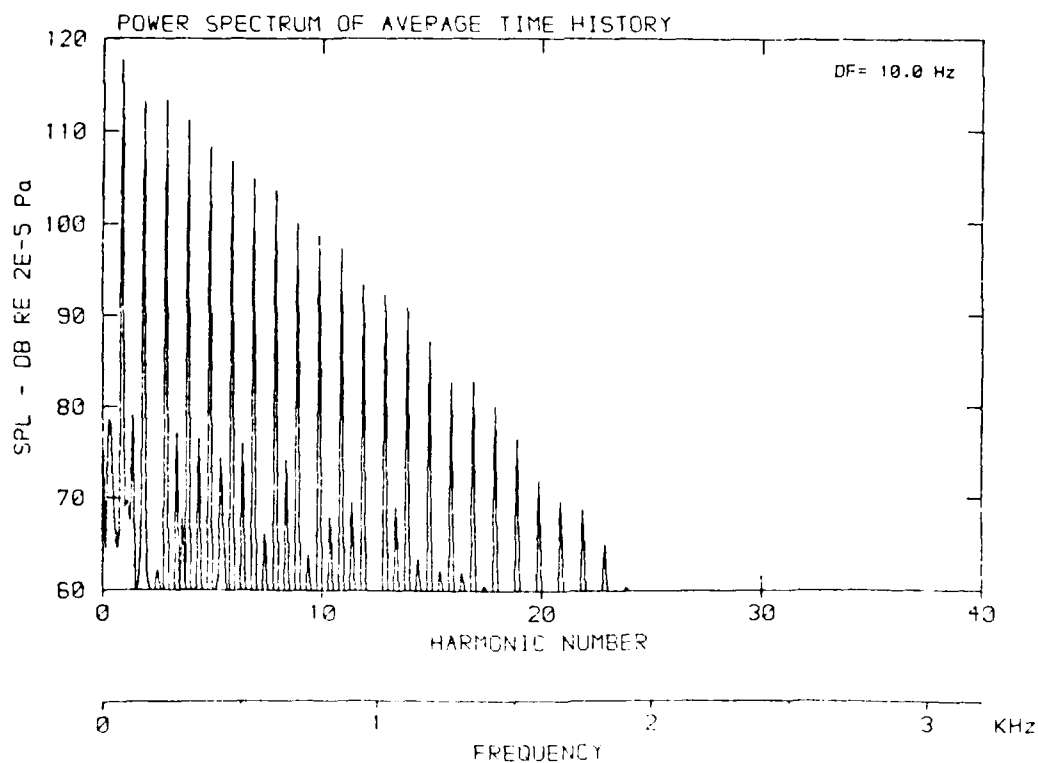
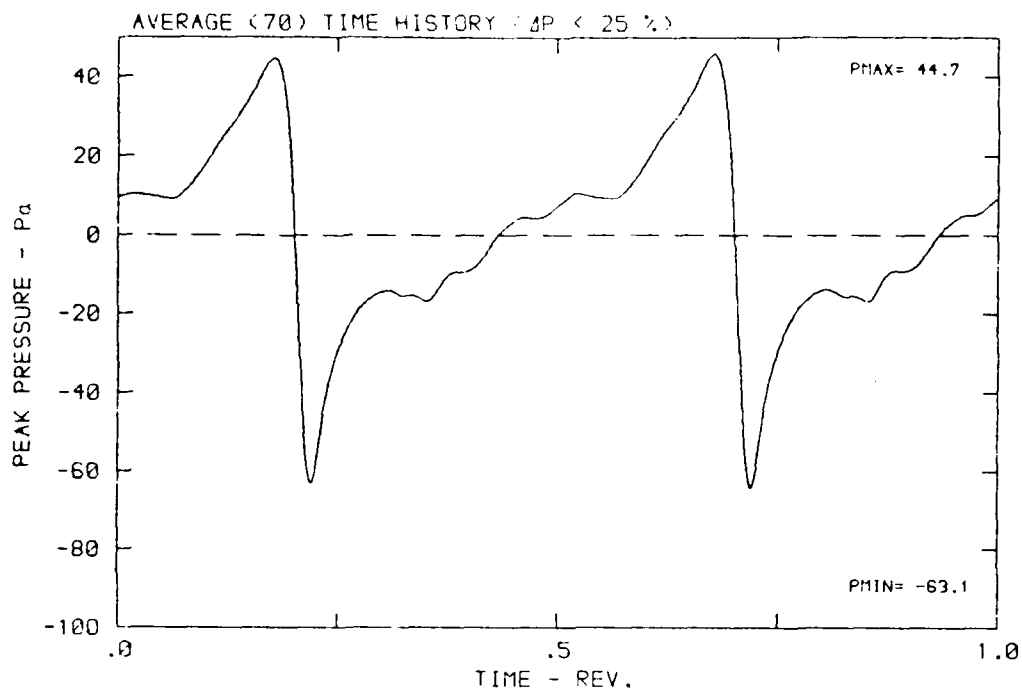
DATA POINT: EC-2 RUN: 131 MP: 4

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



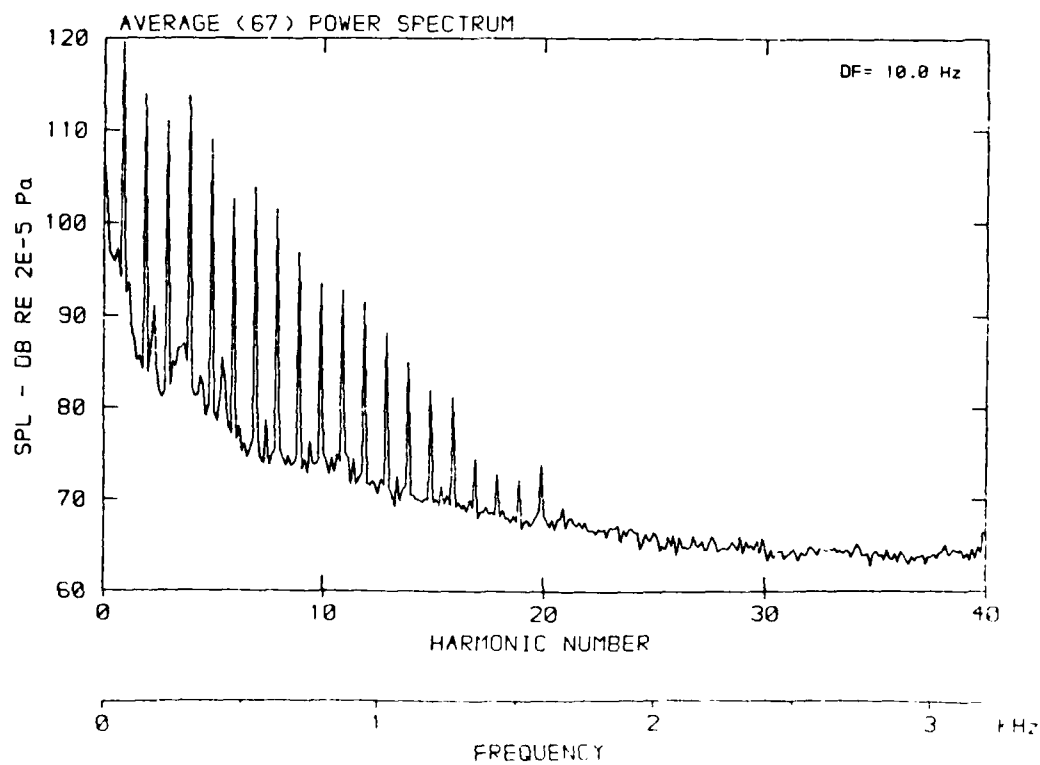
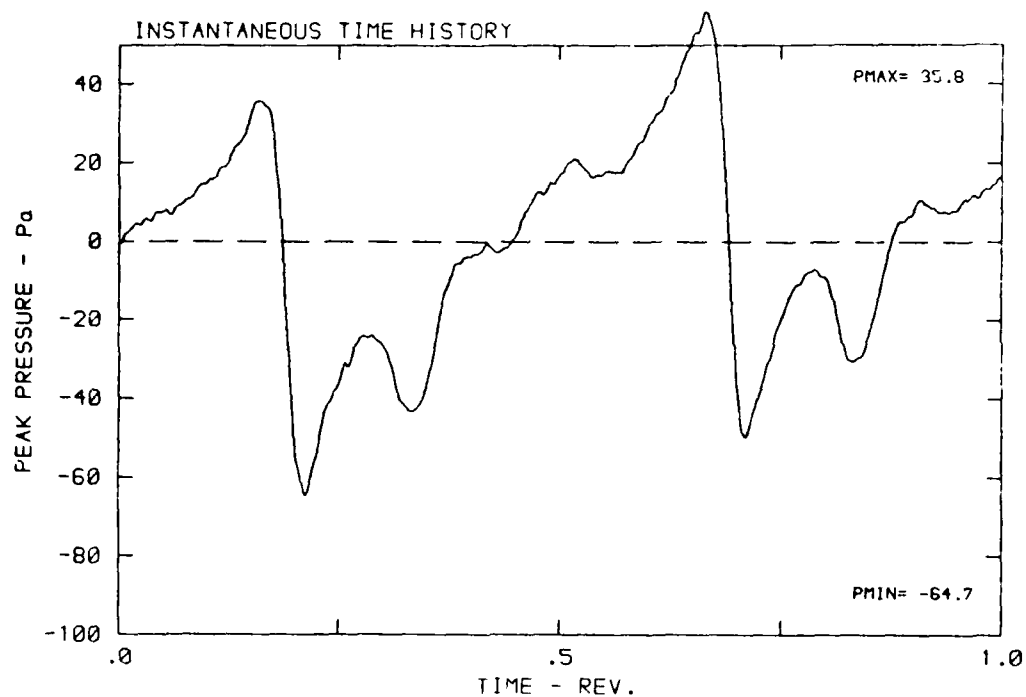
DATA POINT: EC-2 RUN: 131 MP: 4

β : 20.7° MH: .7666 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



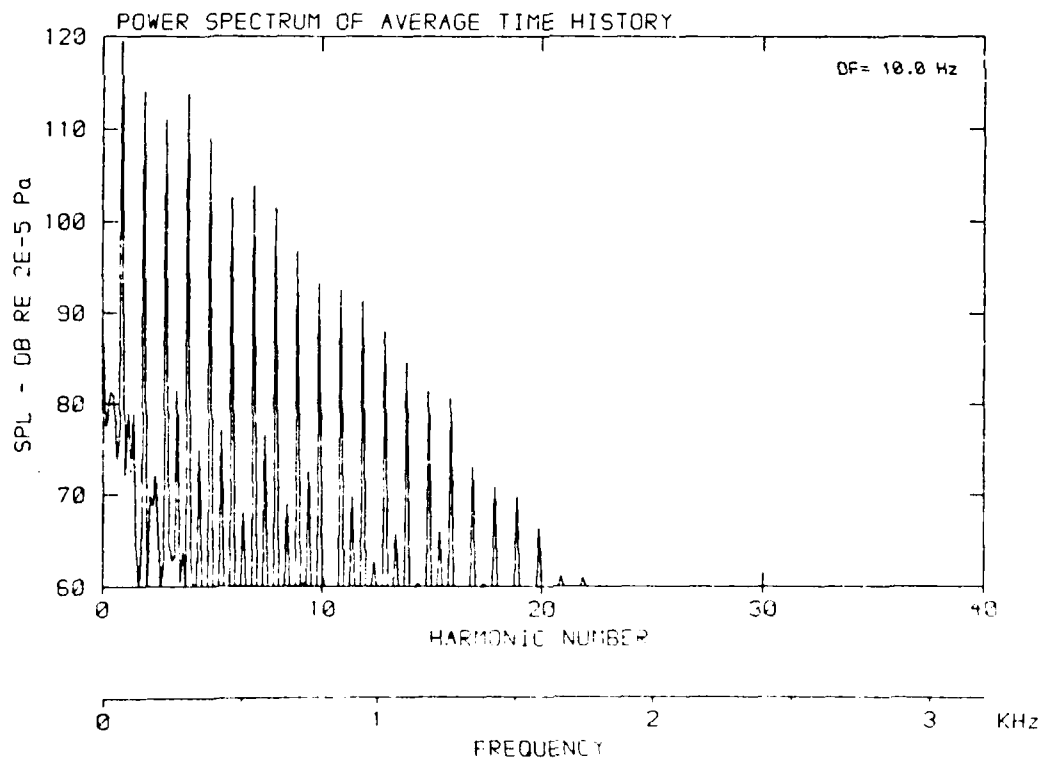
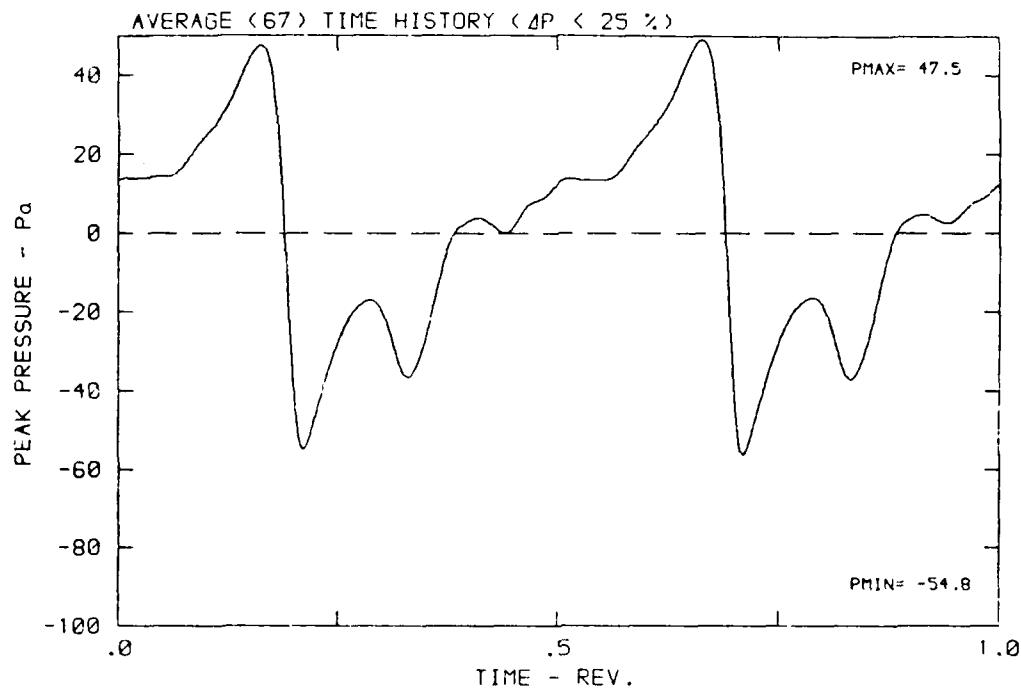
DATA POINT: EC-2 RUN: 131 MP: 5

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



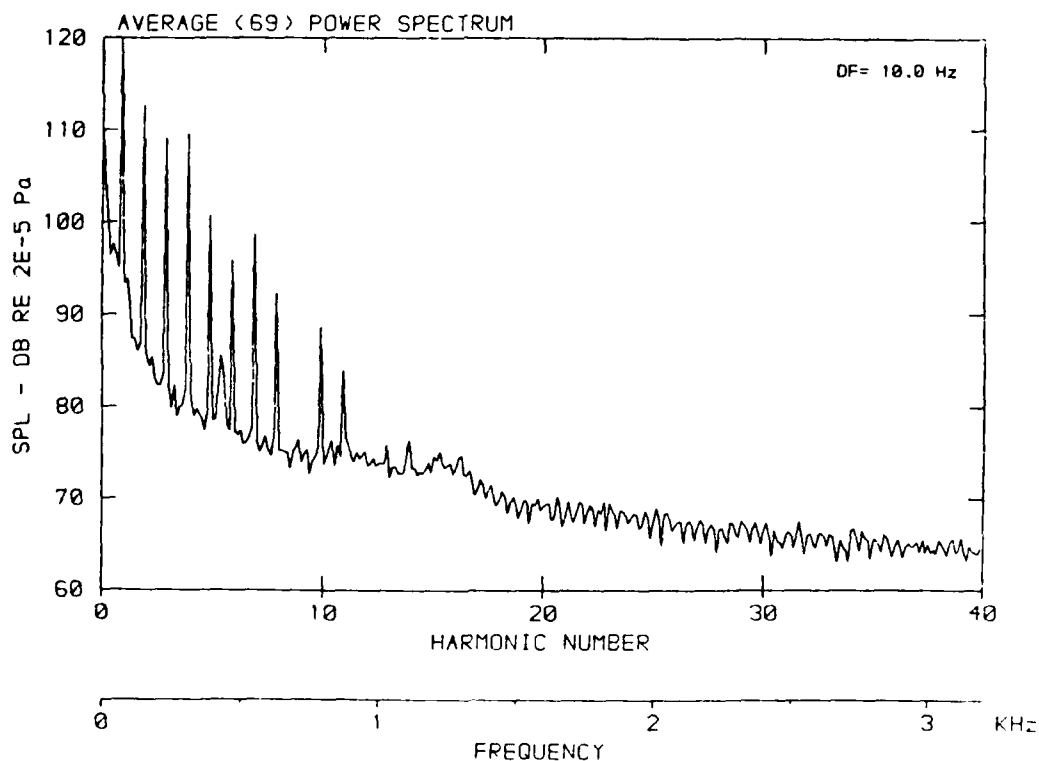
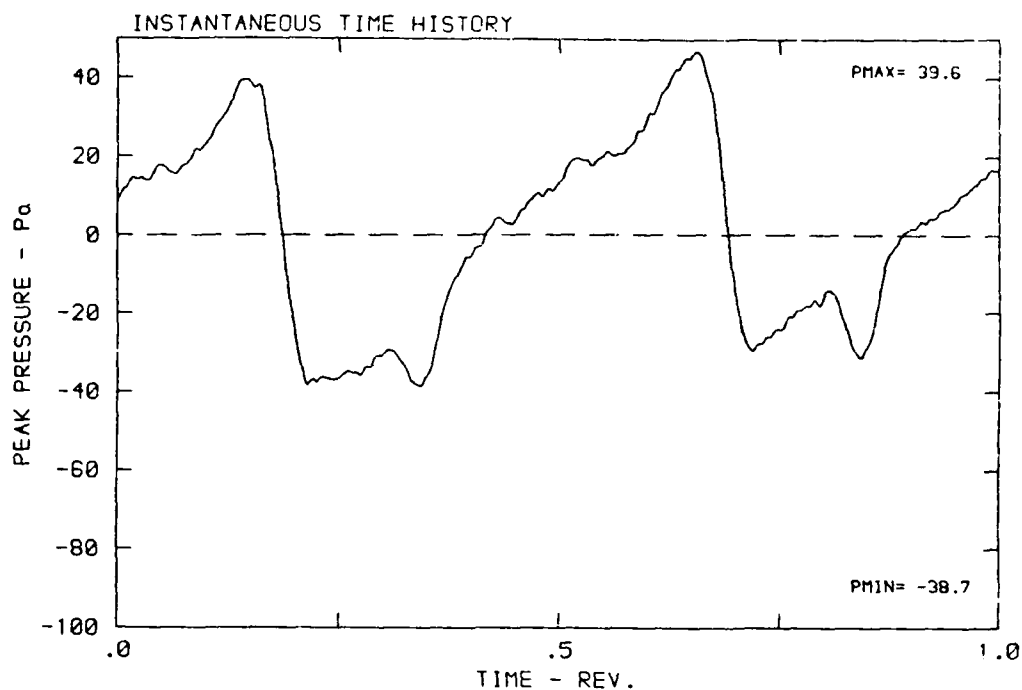
DATA POINT: EC-2 RUN: 131 MP: 5

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



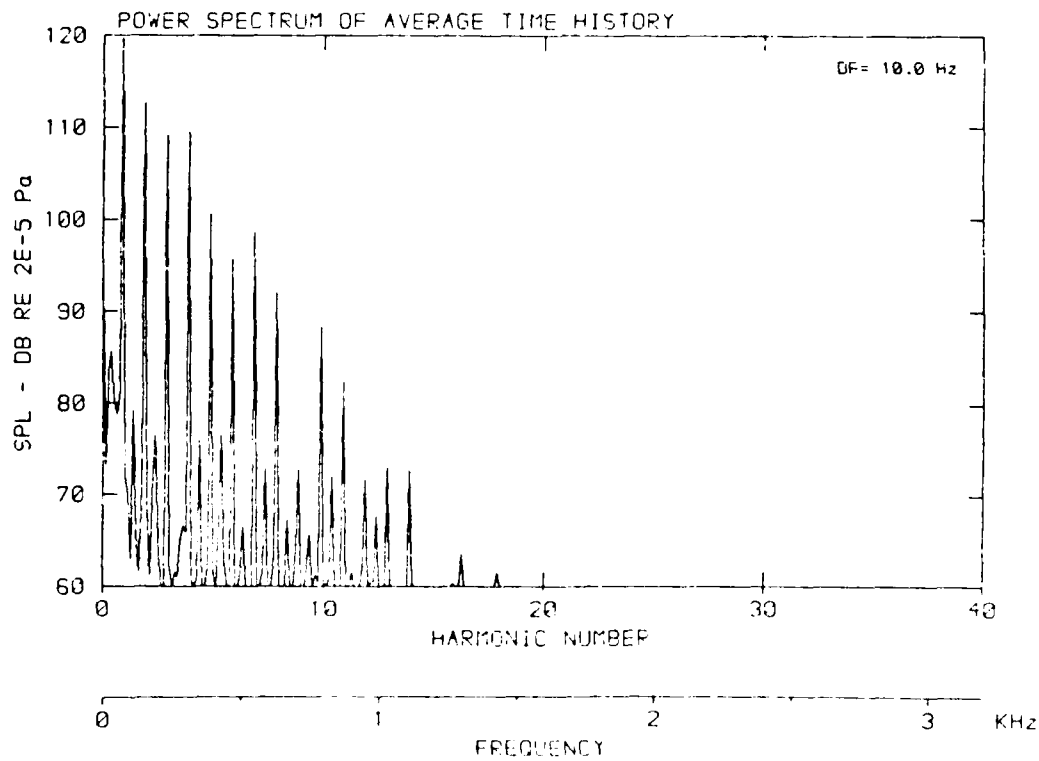
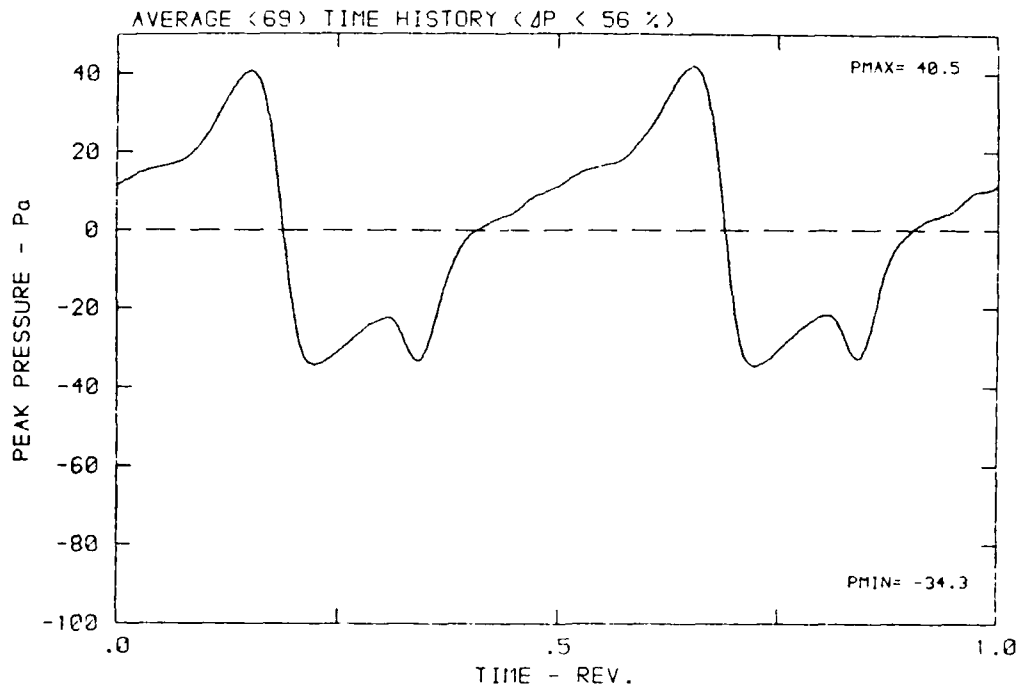
DATA POINT: EC-2 RUN: 131 MP: 6

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



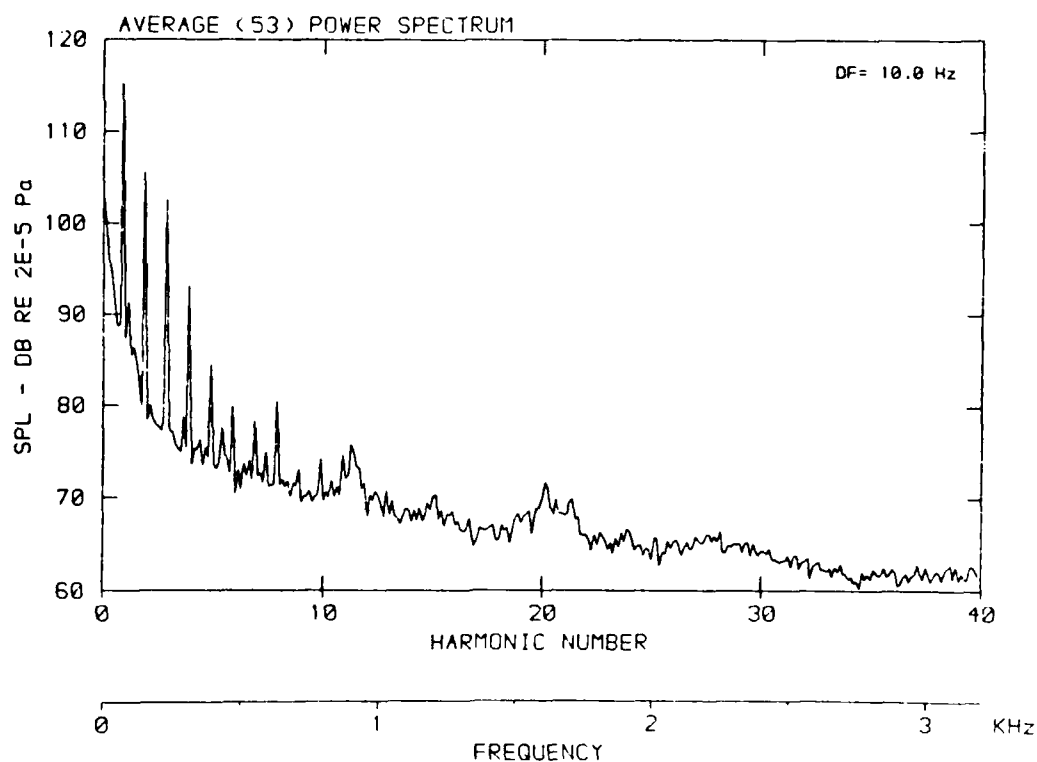
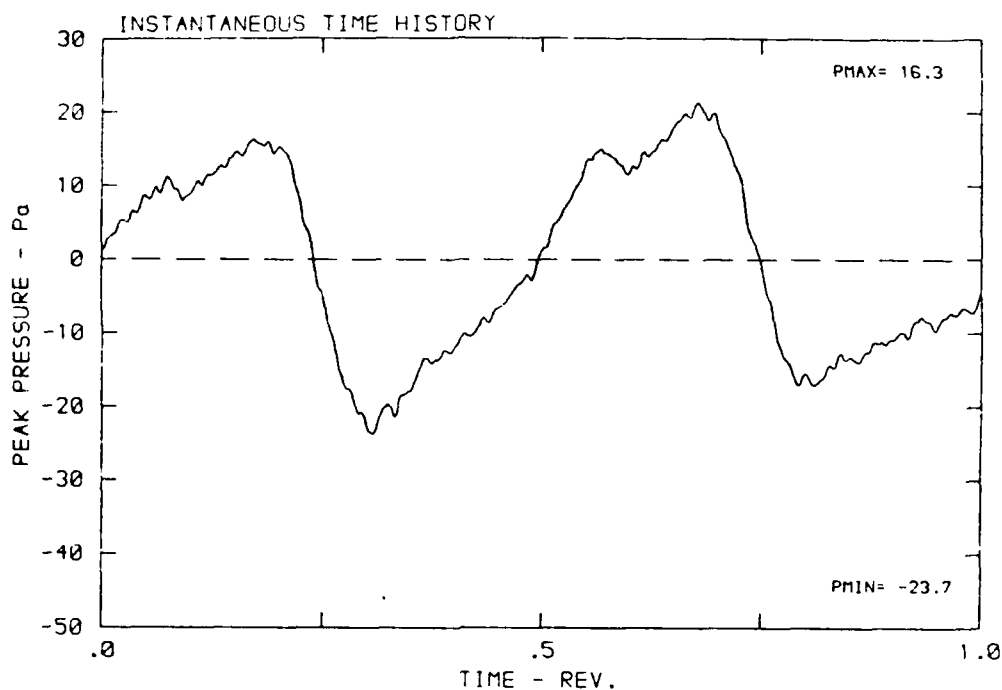
DATA POINT: EC-2 RUN: 131 MP: 6

β : 20.7° MH: .7665 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



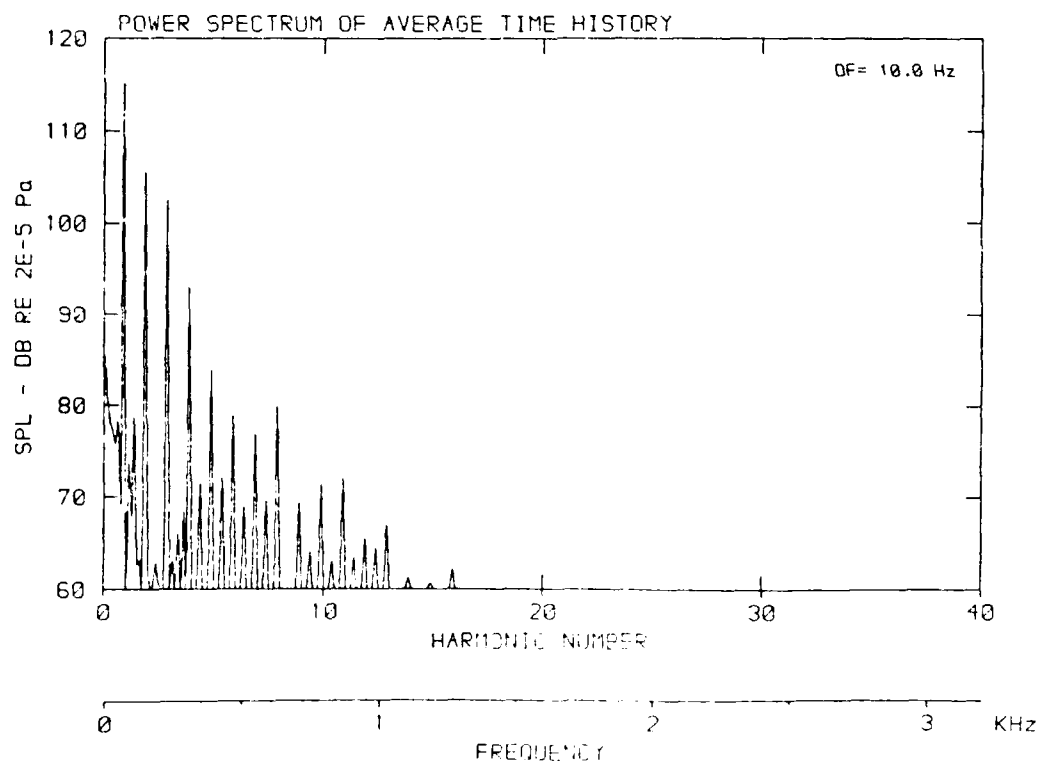
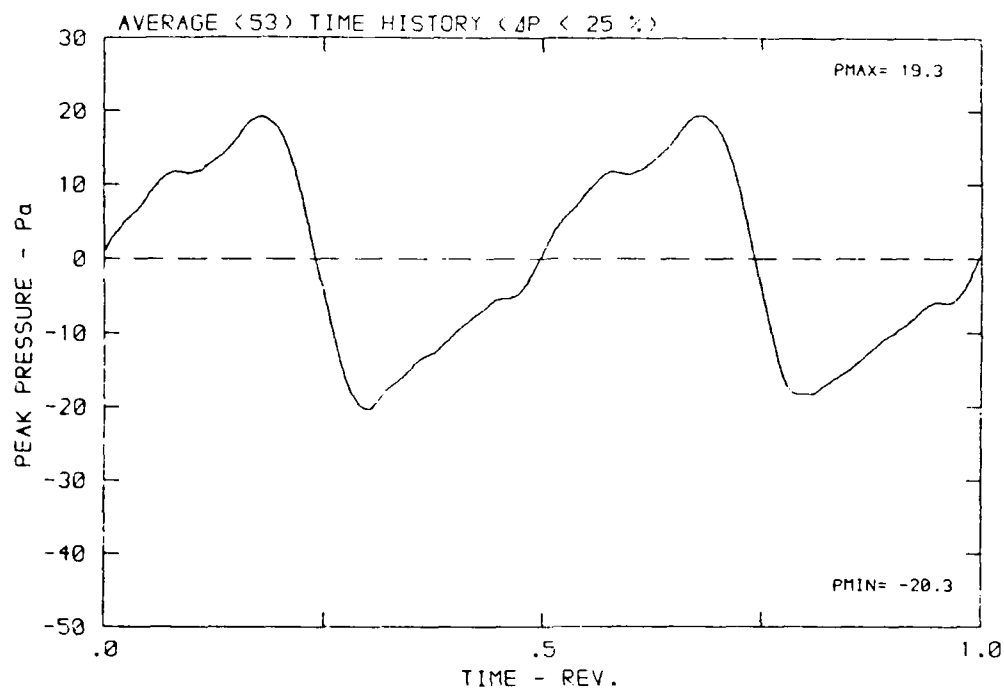
DATA POINT: EC-2 RUN: 131 MP: 7

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



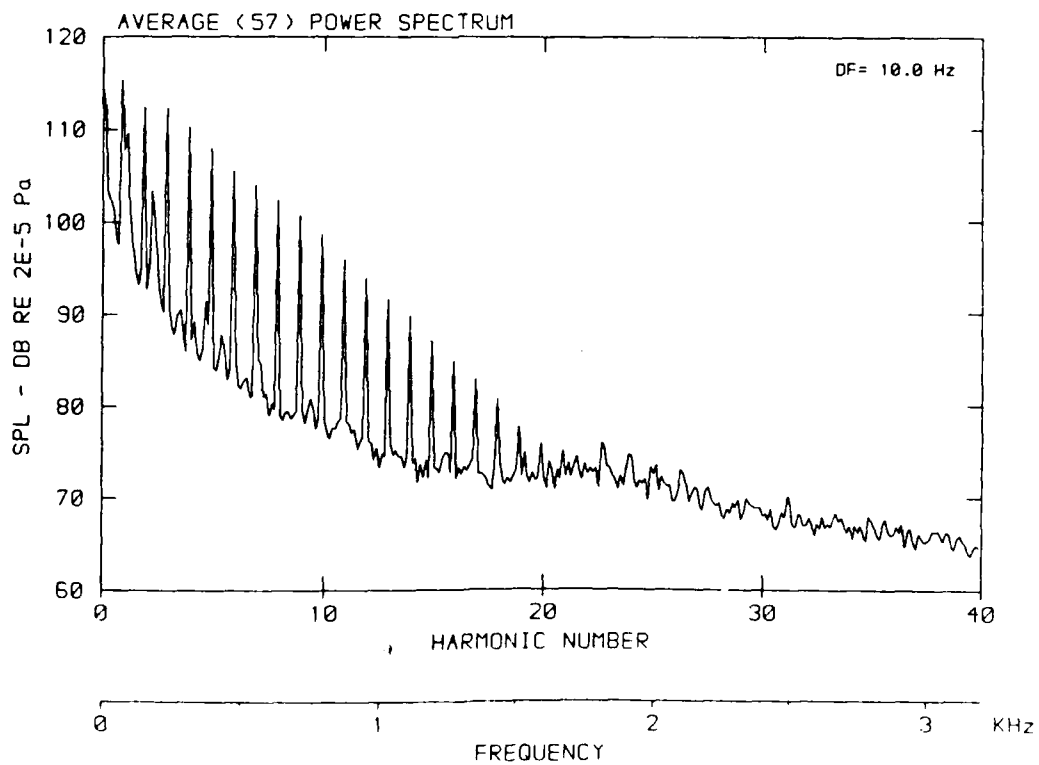
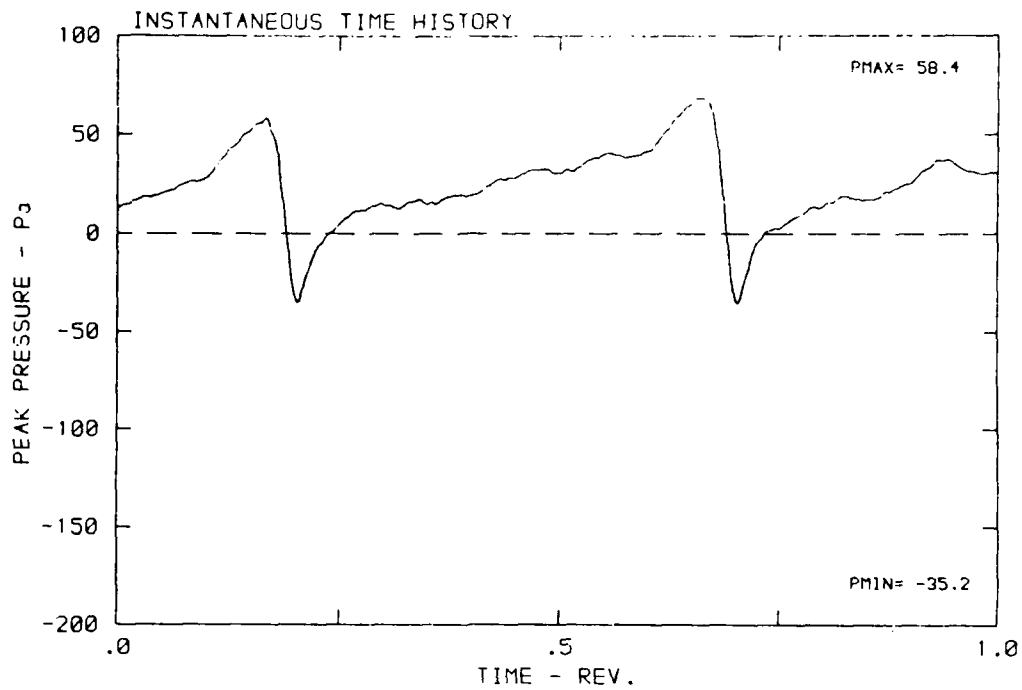
DATA POINT: EC-2 RUN: 131 MP: 7

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



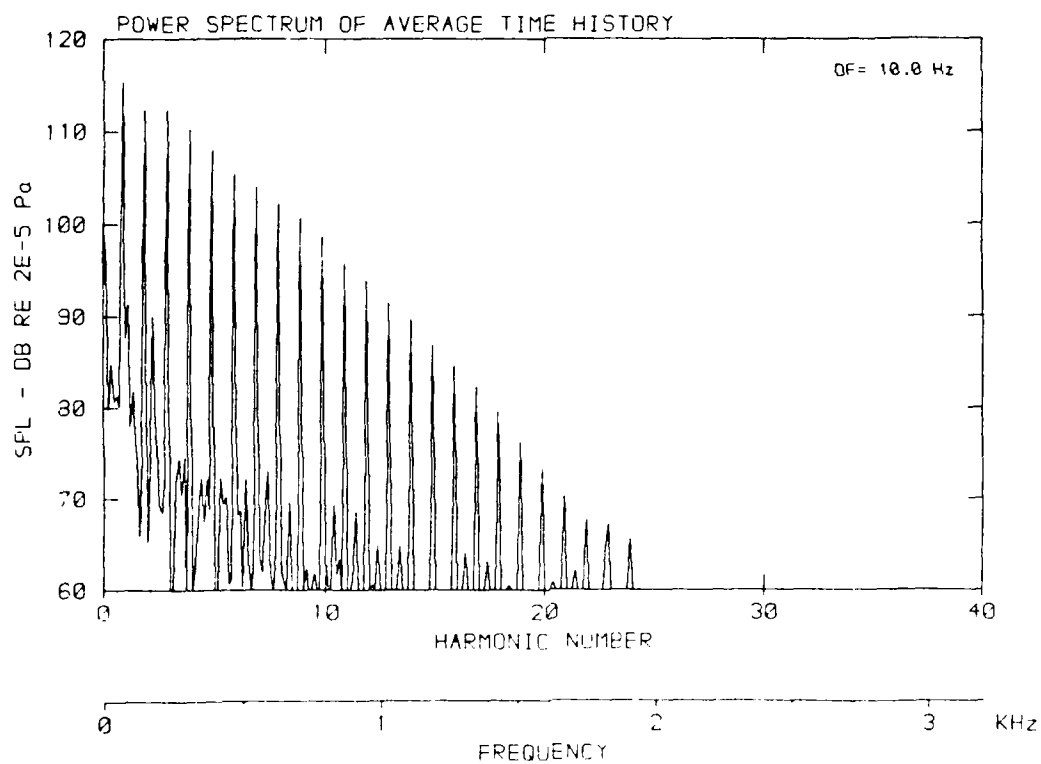
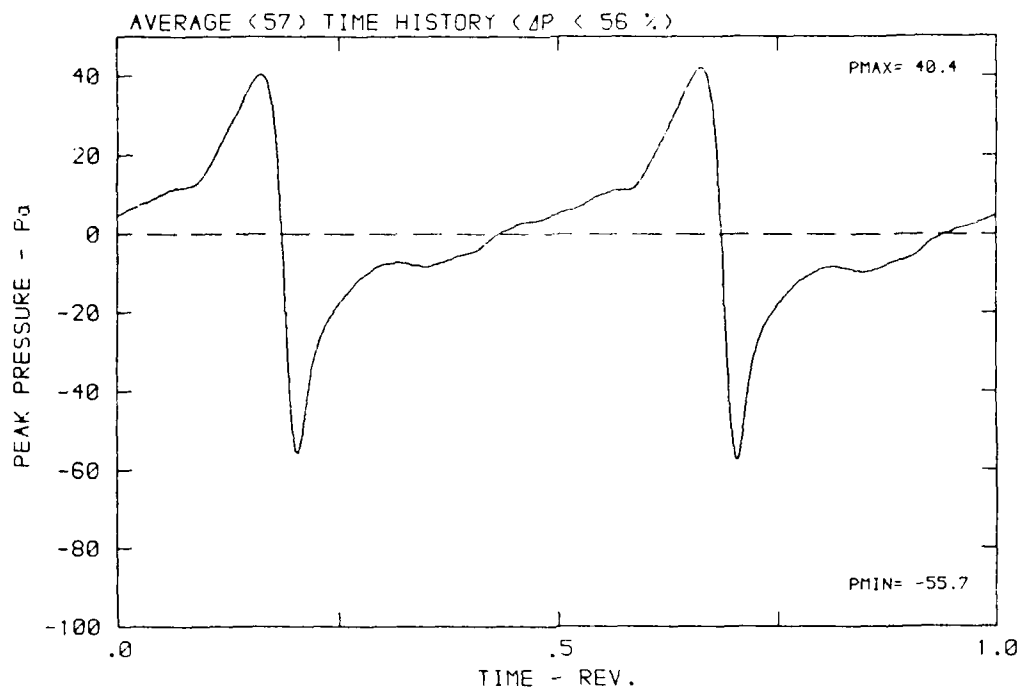
DATA POINT: EC-2 RUN: 131 MP: 8

β : 20.7° MH: .7666 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 287.4 K



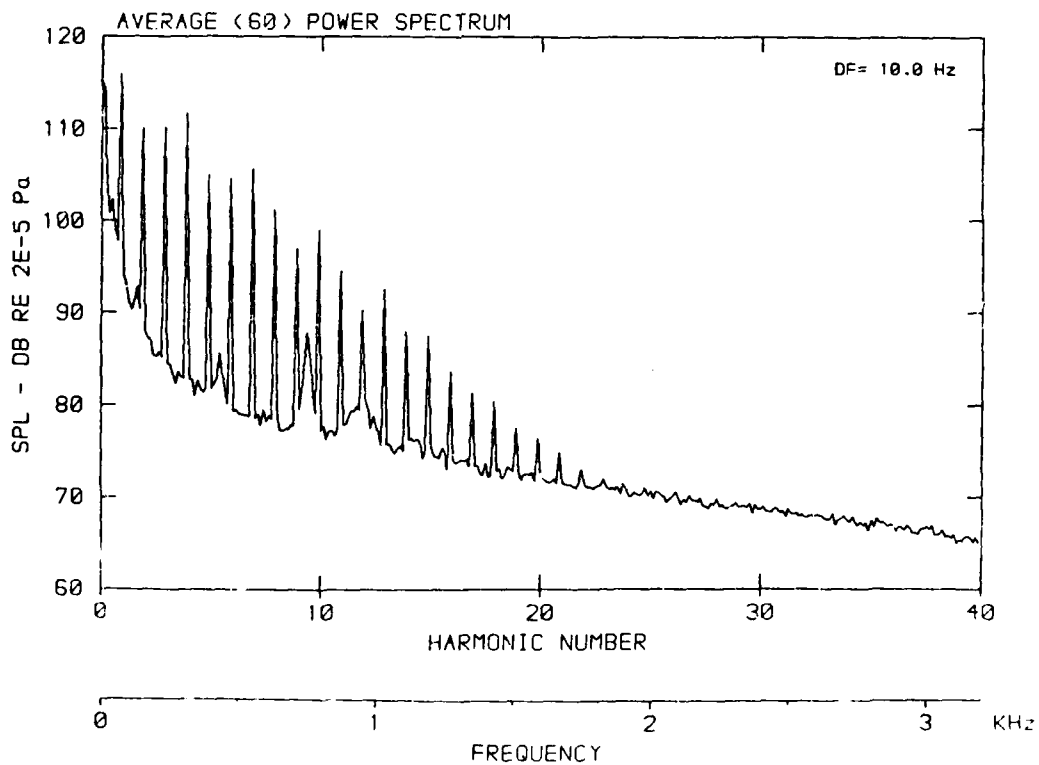
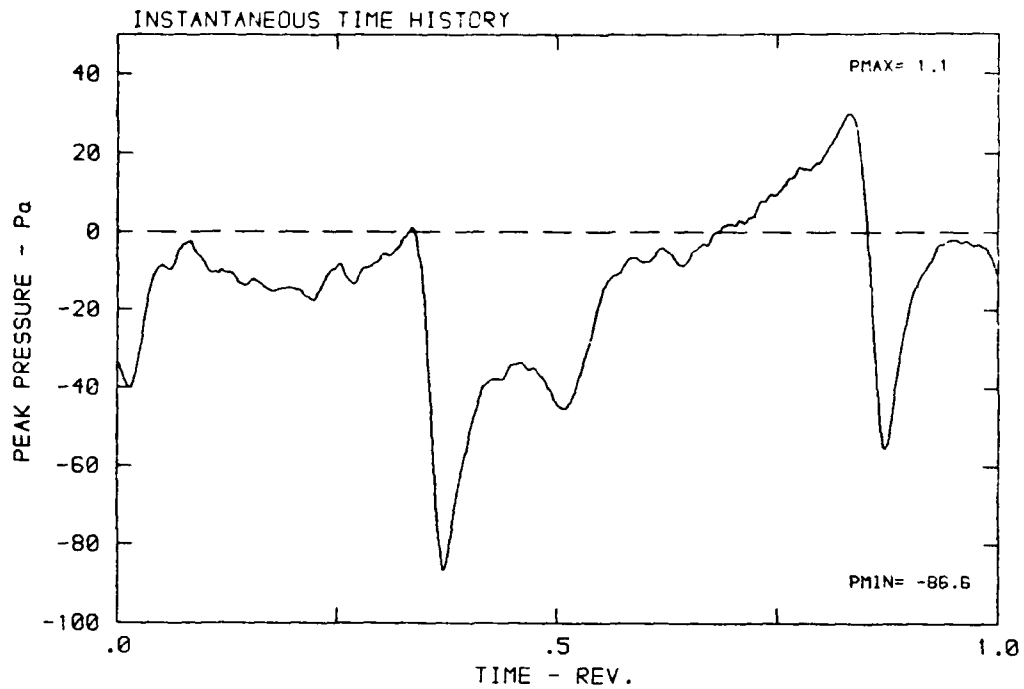
DATA POINT: EC-2 RUN: 131 MP: 8

β : 20.7° MH: .7666 n: 2400 rpm v-u: .203 ϕ : 7.3° T: 287.4 K



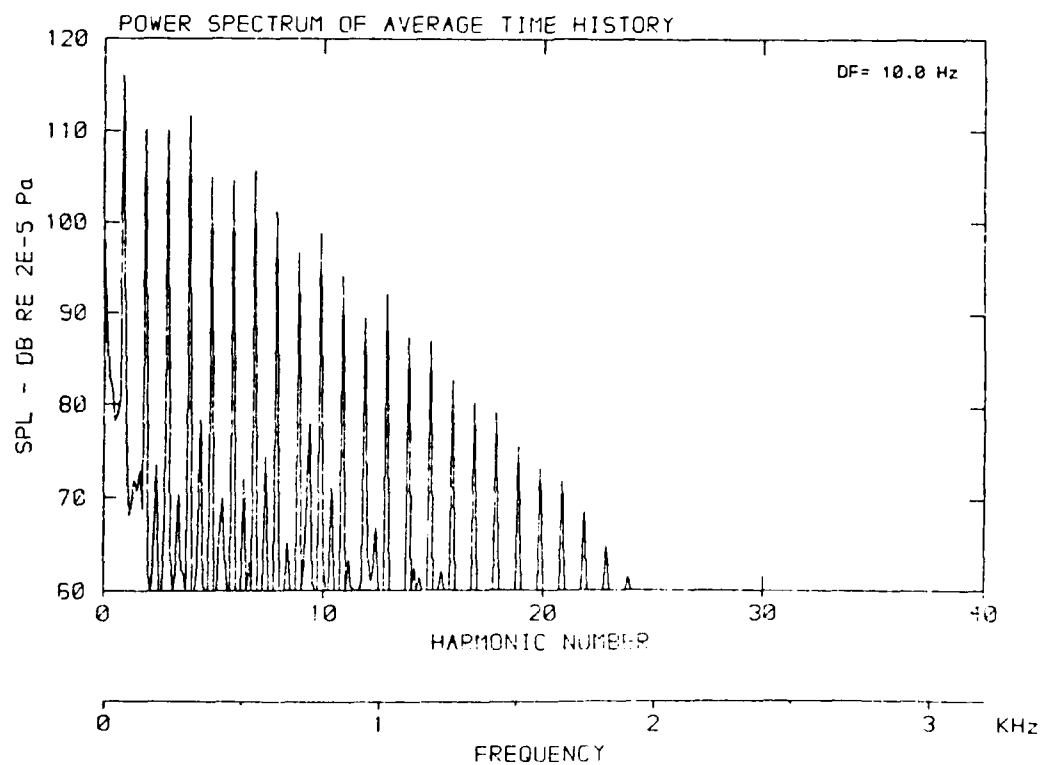
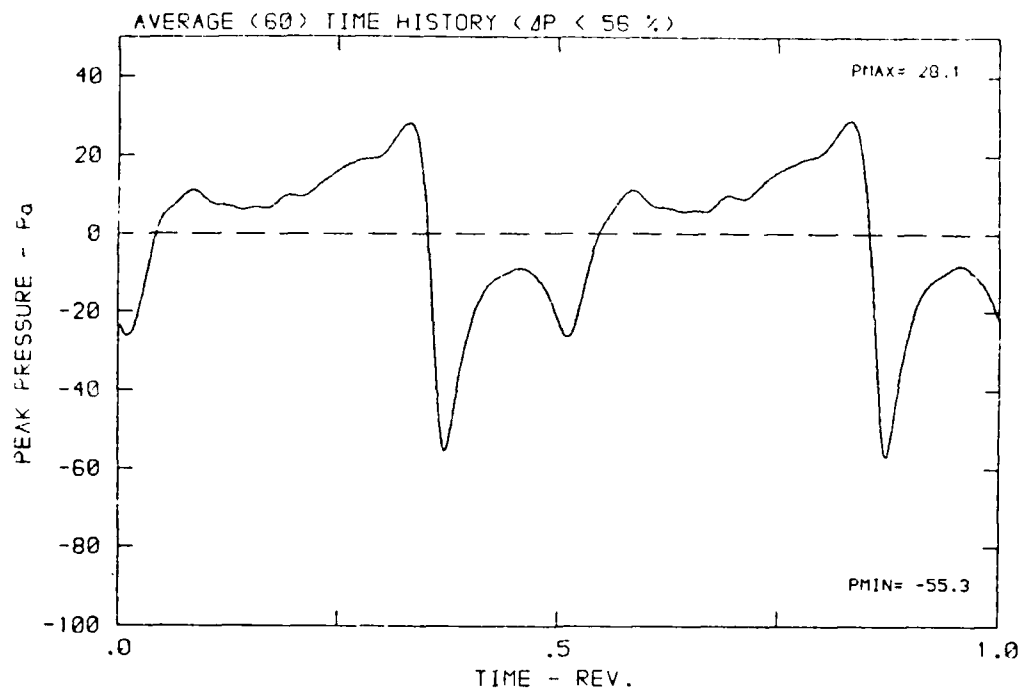
DATA POINT: EC-2 RUN: 131 MP: 9

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



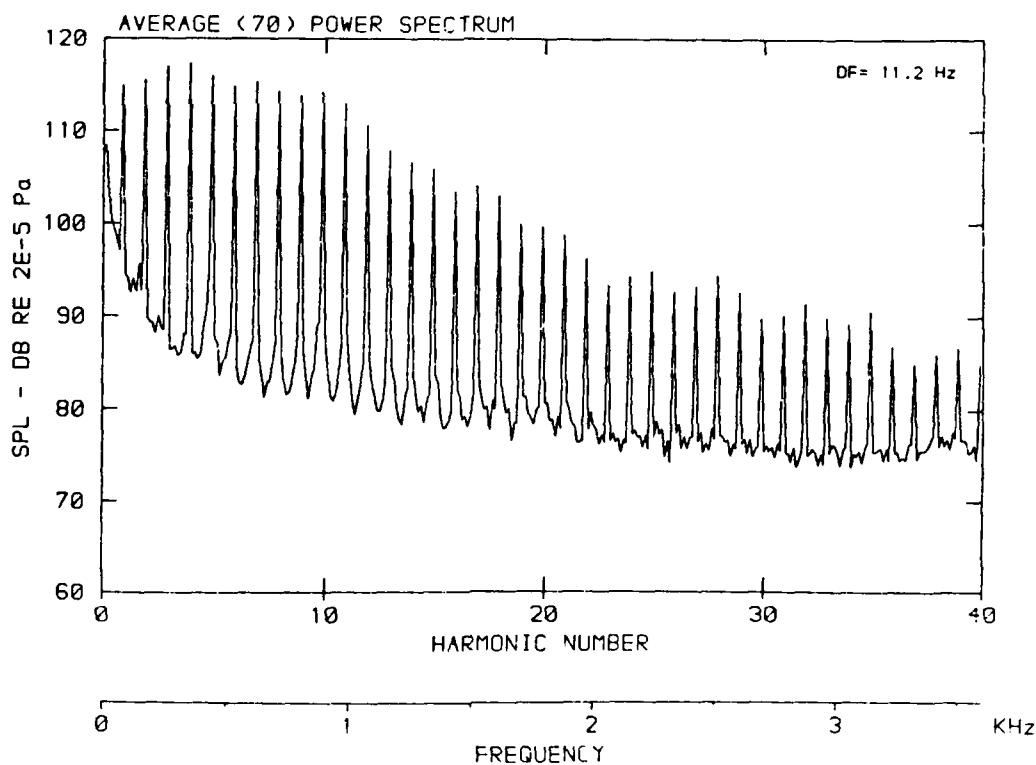
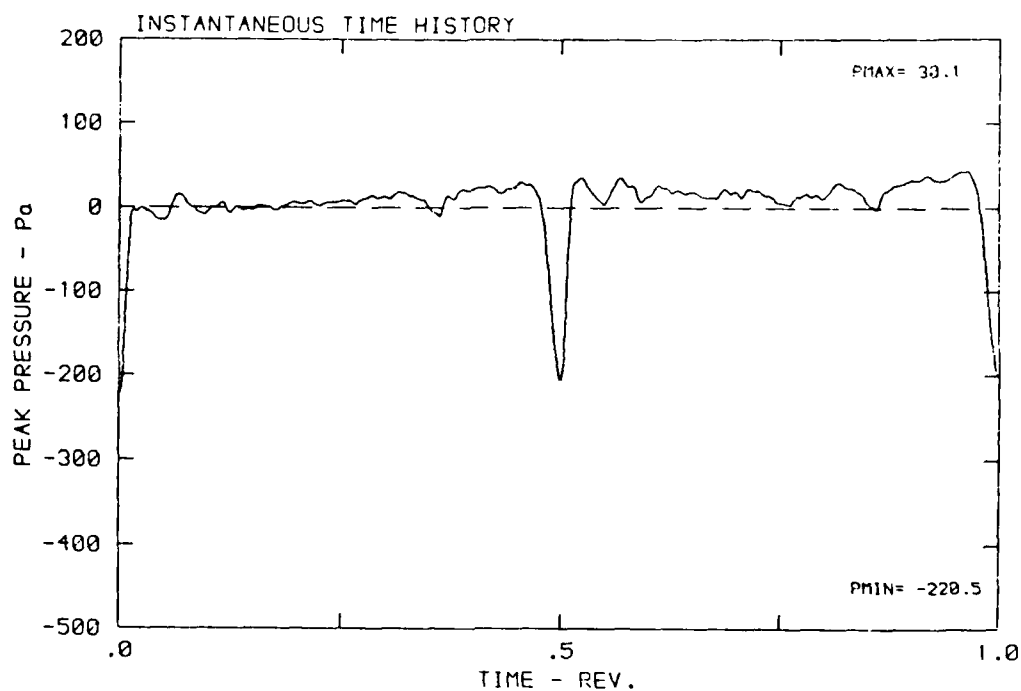
DATA POINT: EC-2 RUN: 131 MP: 9

β : 20.7° MH: .7666 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 287.4 K



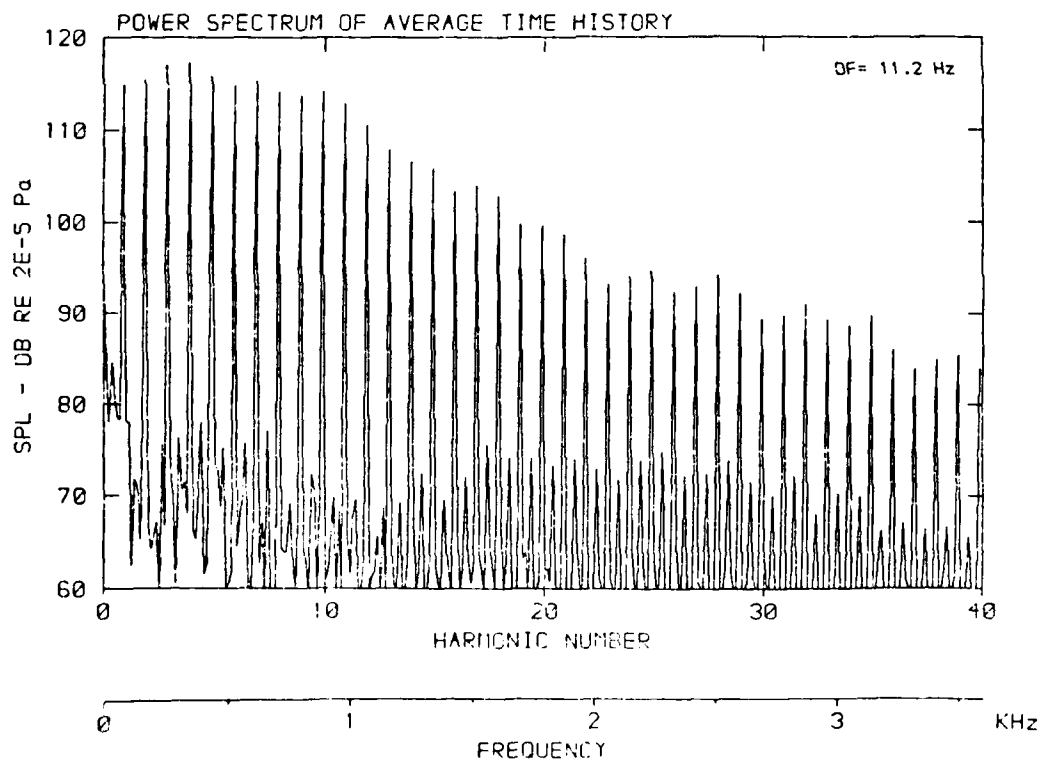
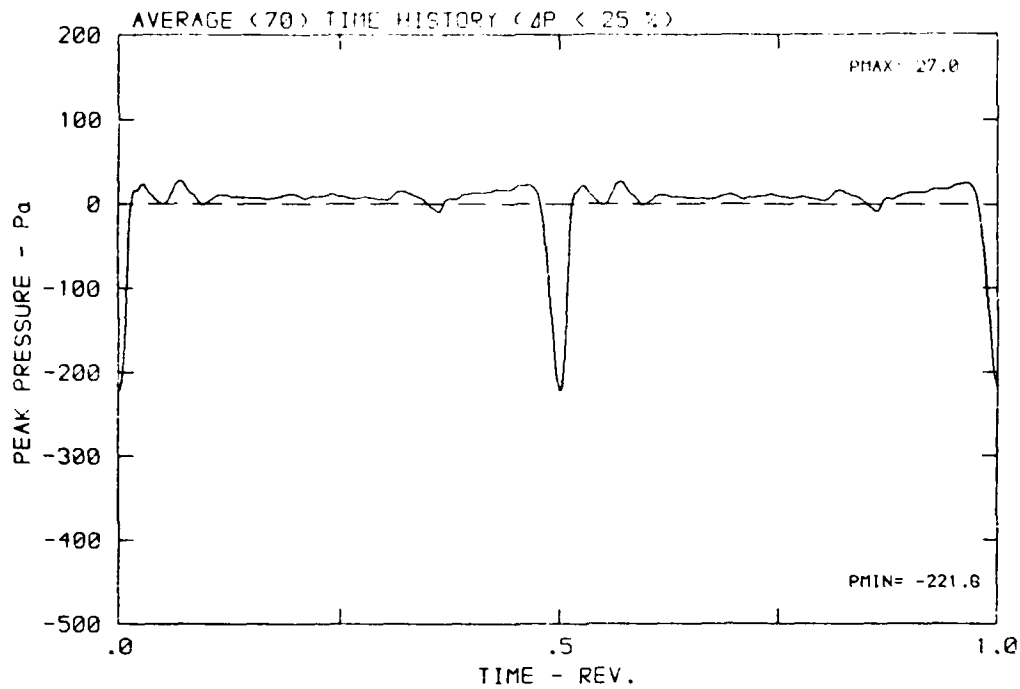
DATA POINT: EC-3 RUN: 132 MP: 1

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 283.5 K



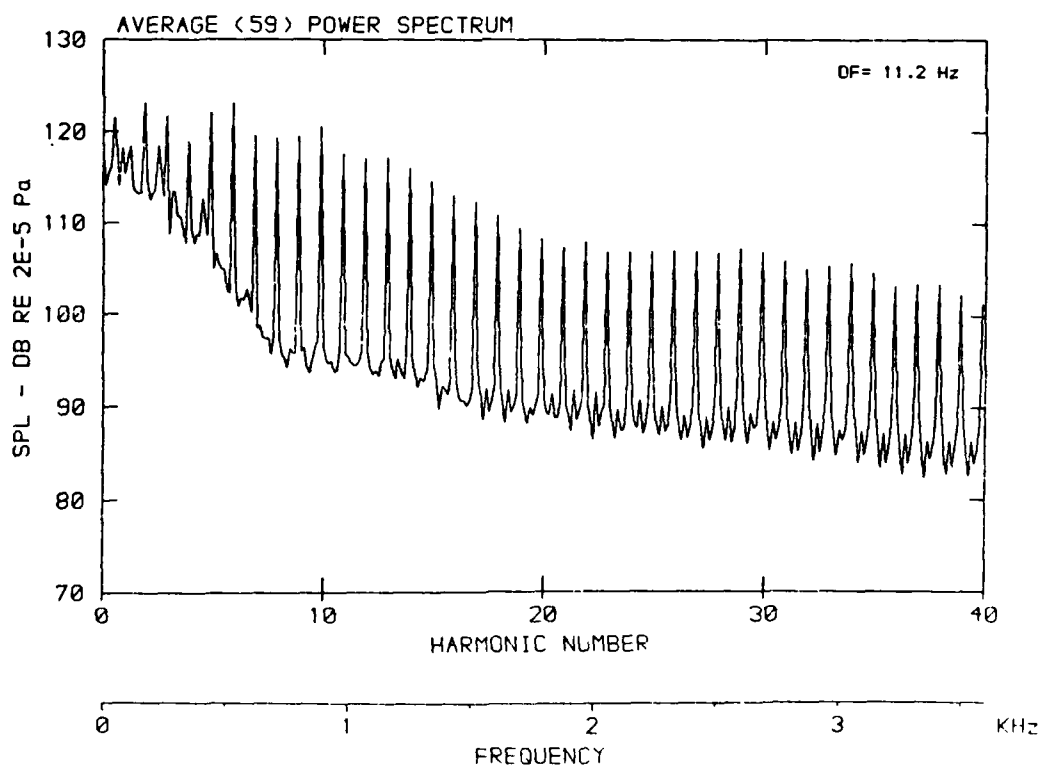
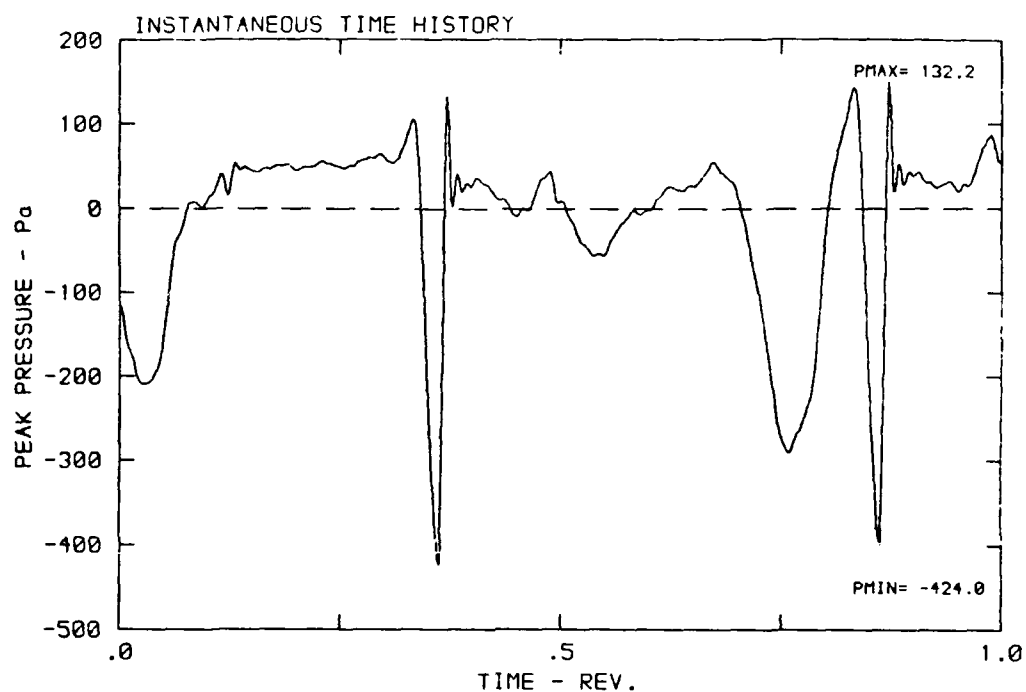
DATA POINT: EC-3 RUN: 132 MP: 1

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



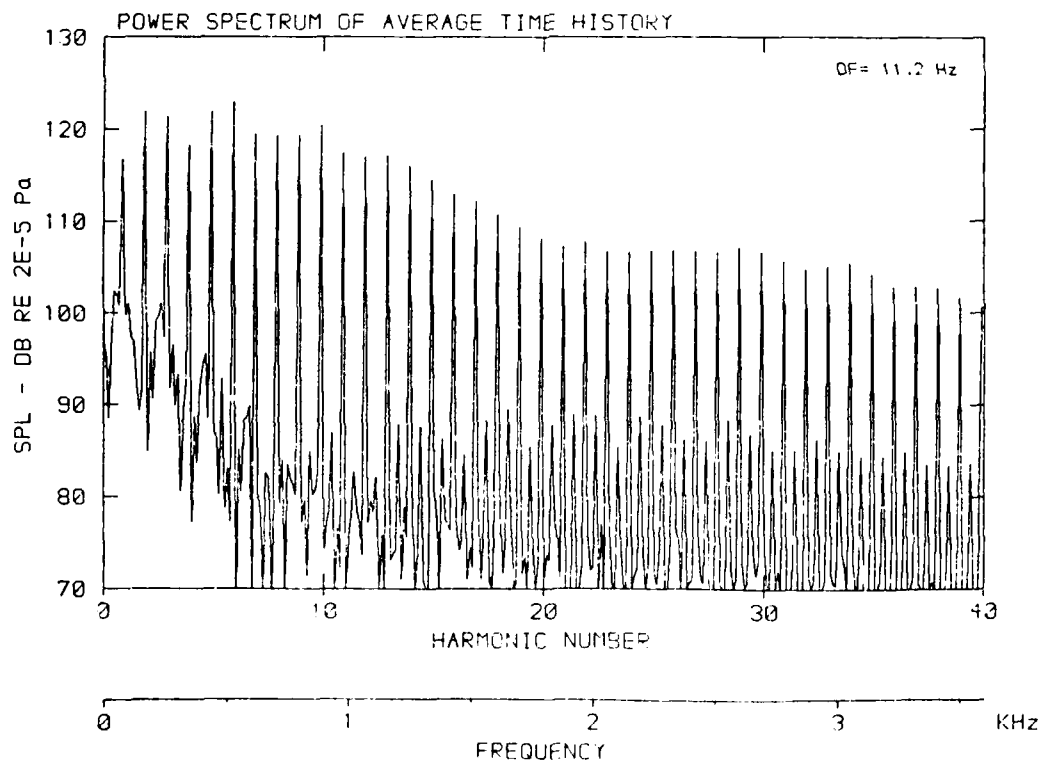
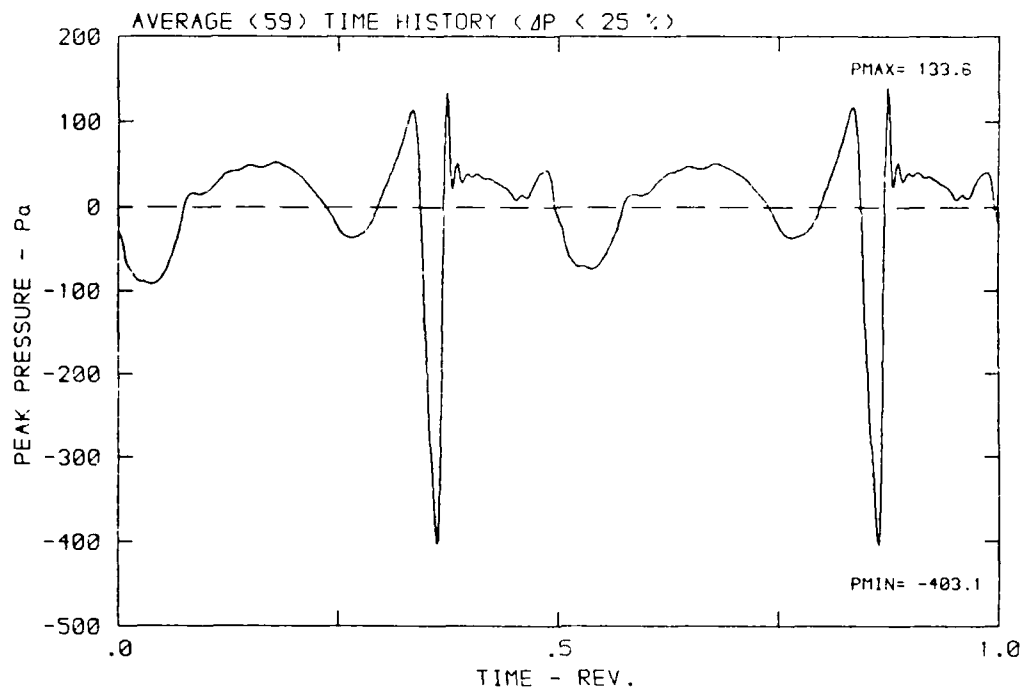
DATA POINT: EC-3 RUN: 132 MP: 2

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



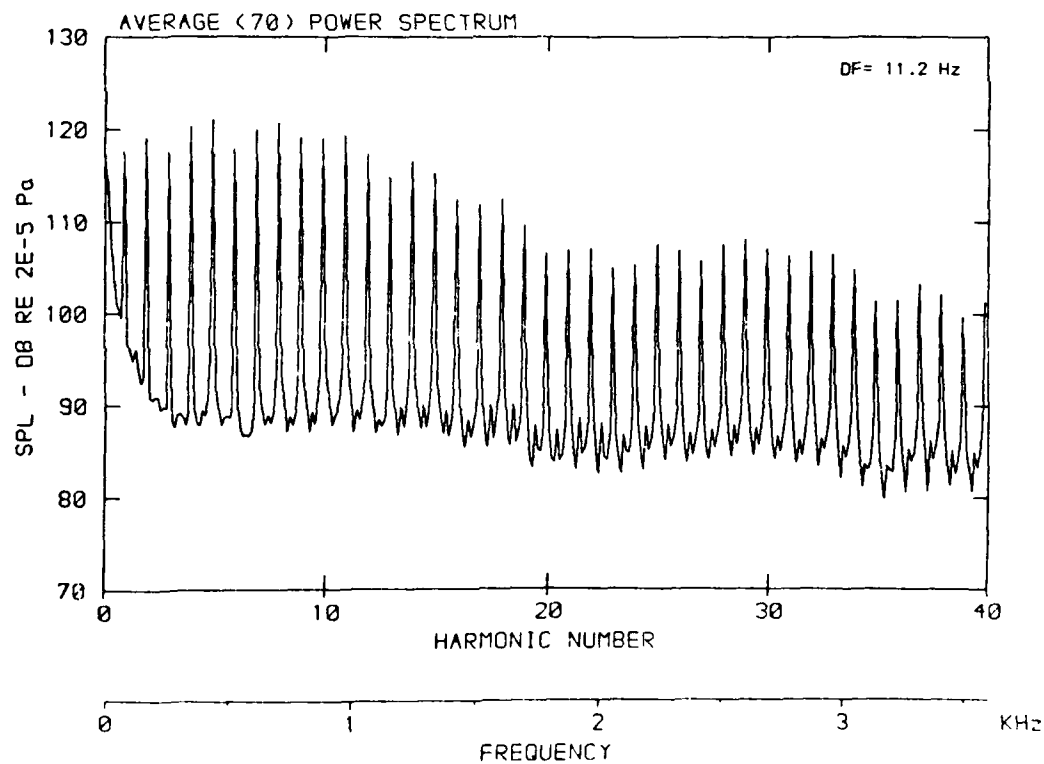
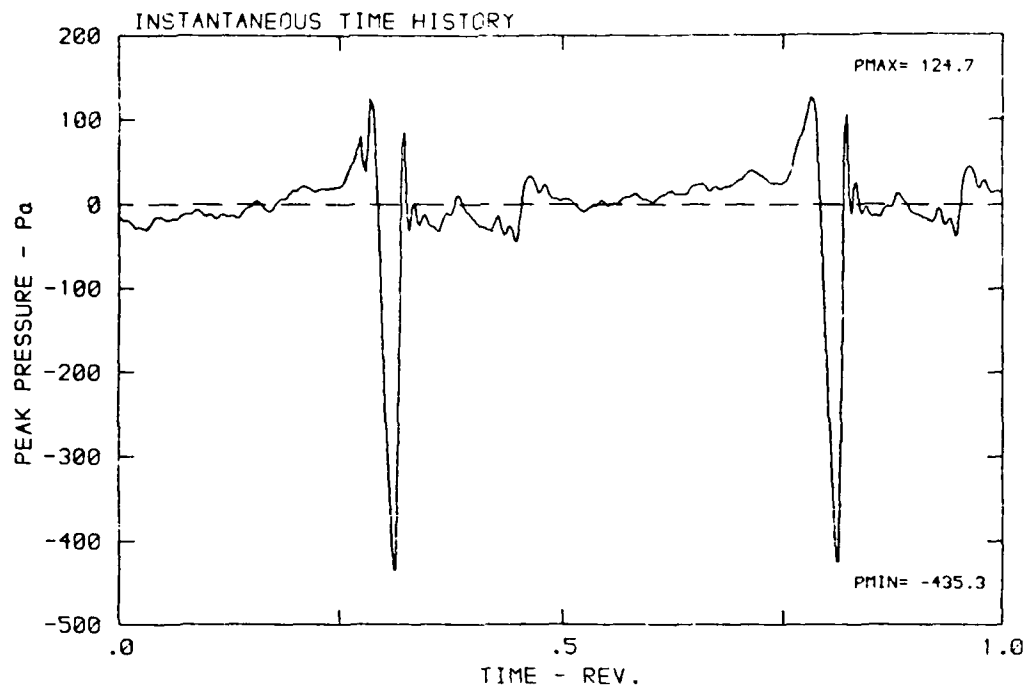
DATA POINT: EC-3 RUN: 132 MP: 2

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



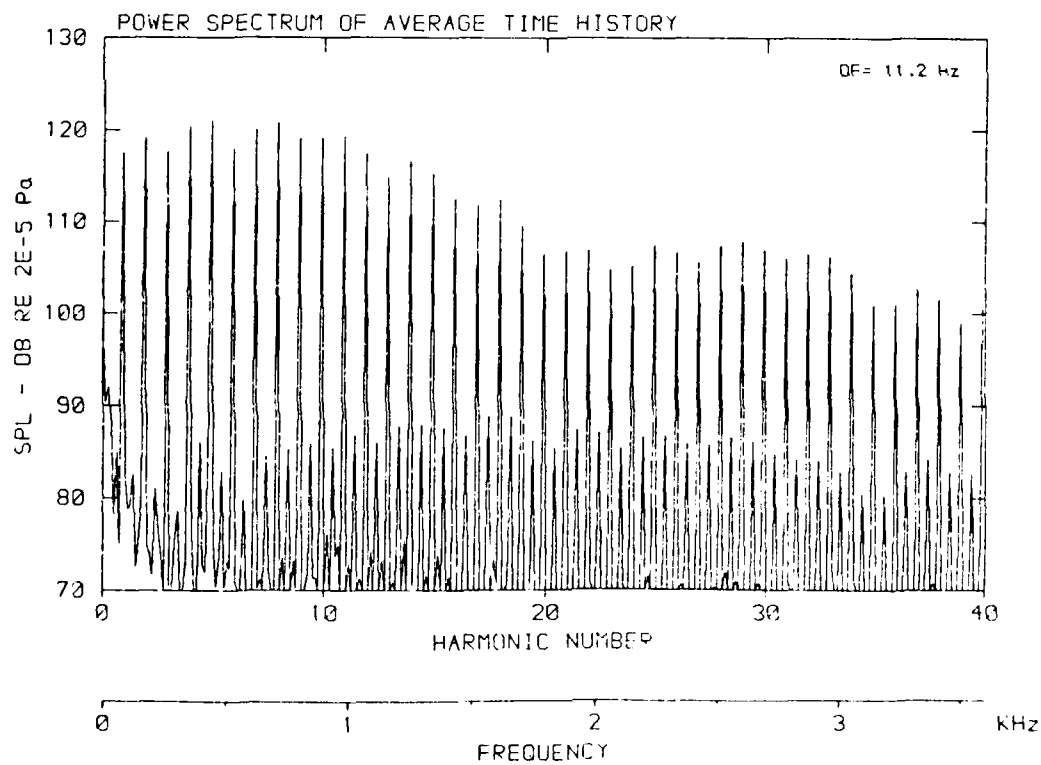
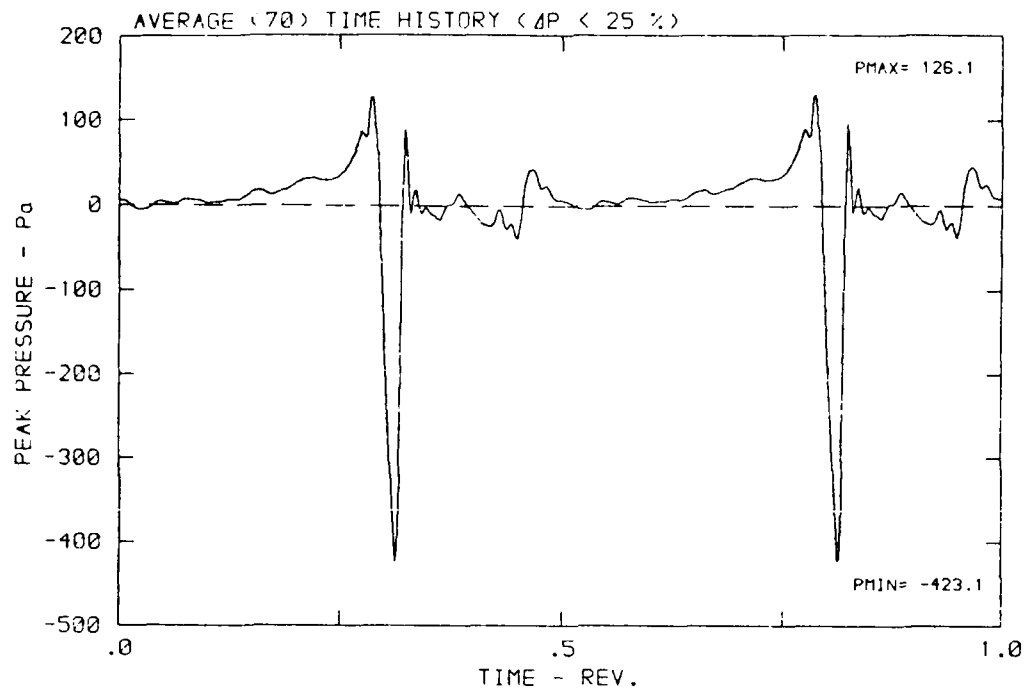
DATA POINT: EC-3 RUN: 132 MP: 3

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



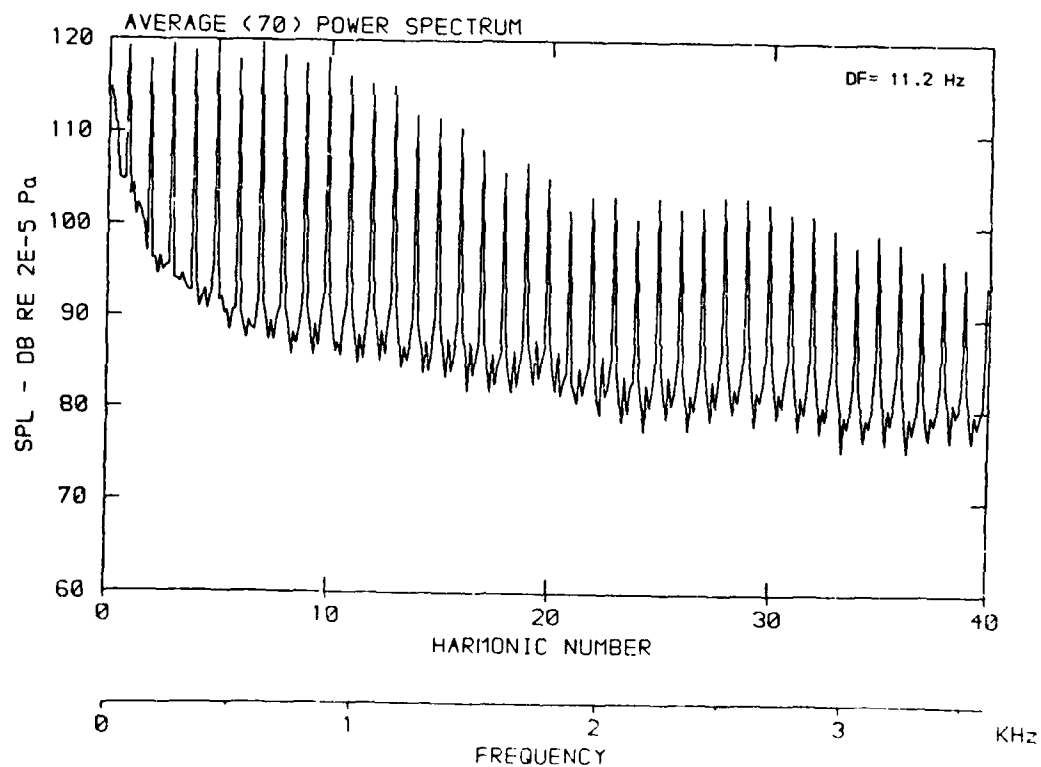
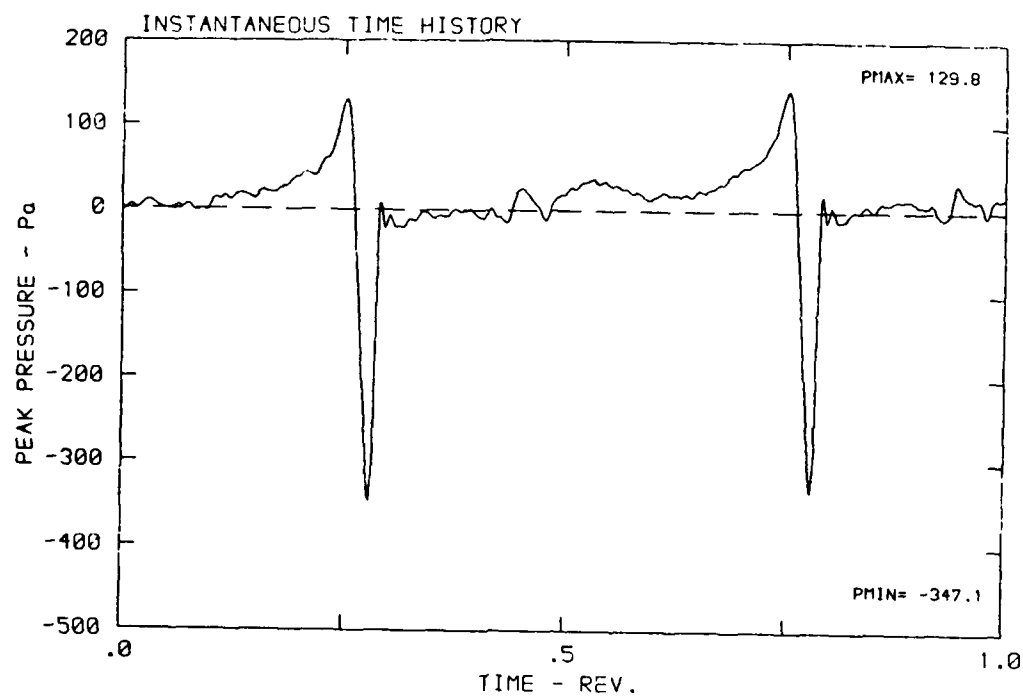
DATA POINT: EC-3 RUN: 132 MP: 3

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



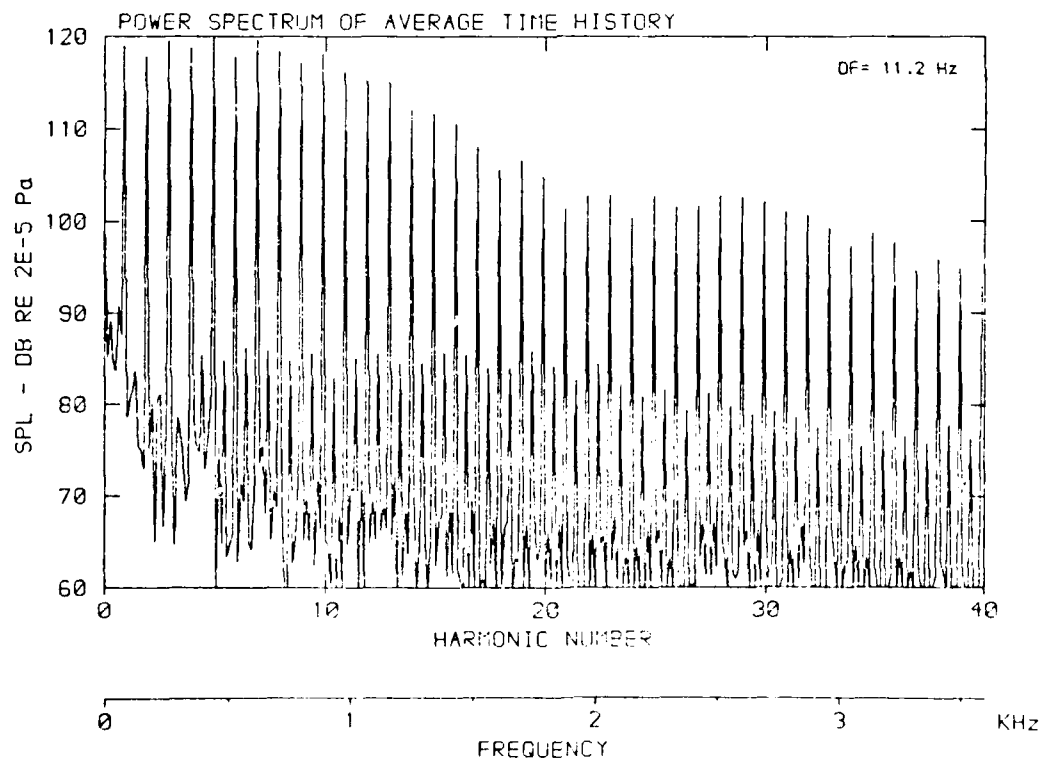
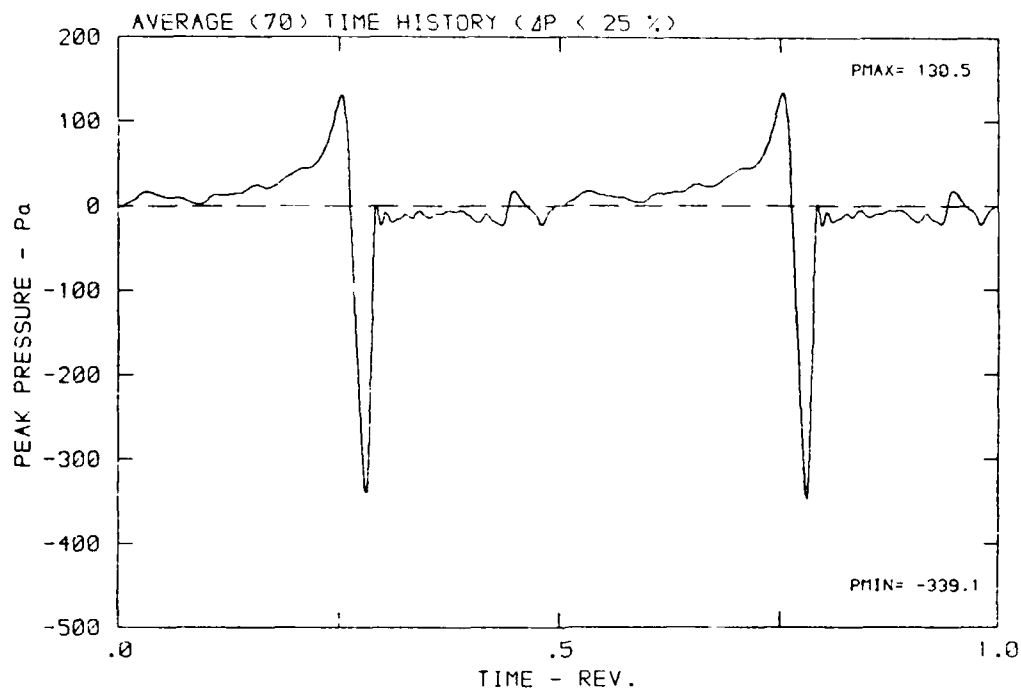
DATA POINT: EC-3 RUN: 132 MP: 4

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



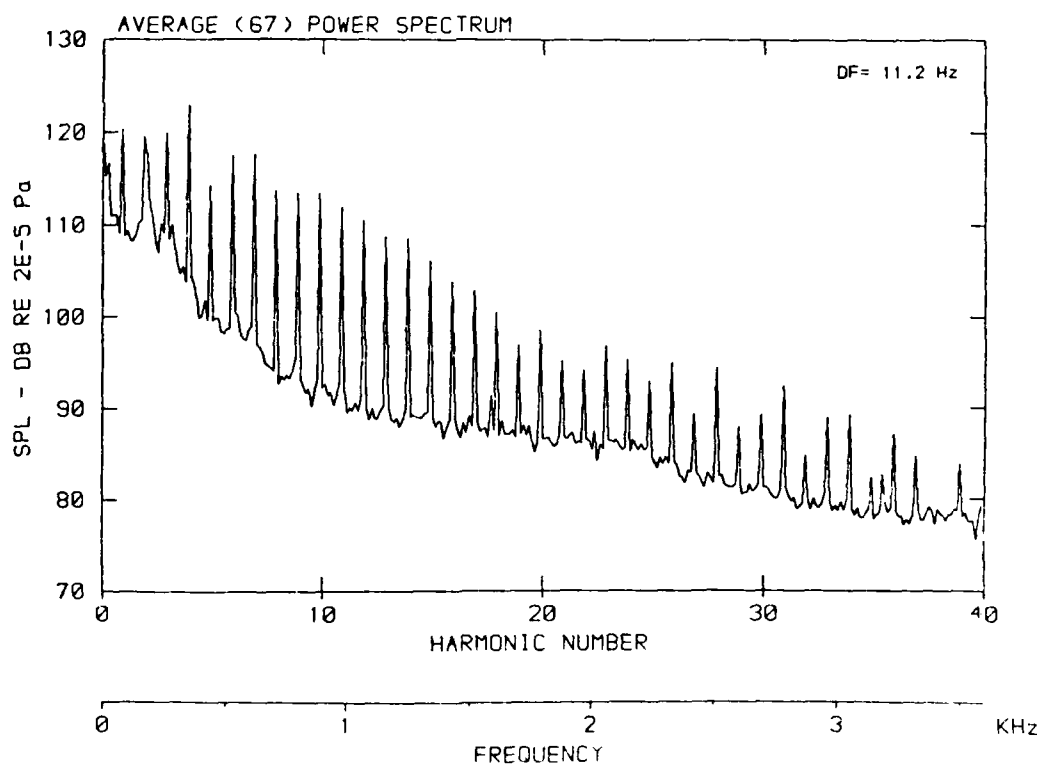
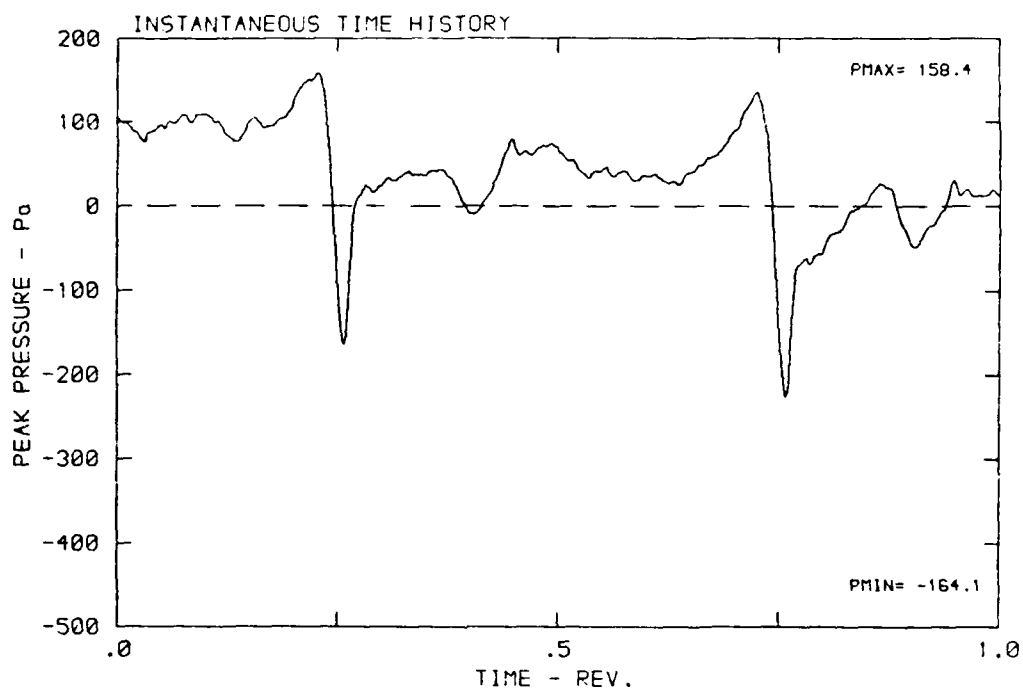
DATA POINT: EC-3 RUN: 132 MP: 4

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



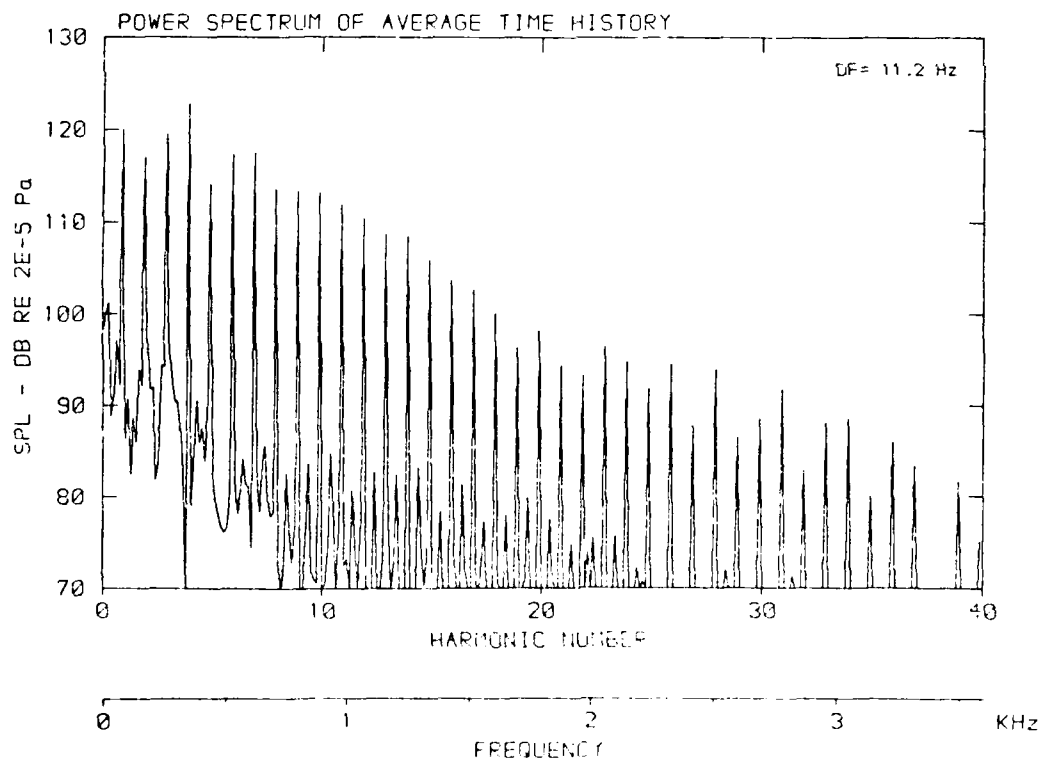
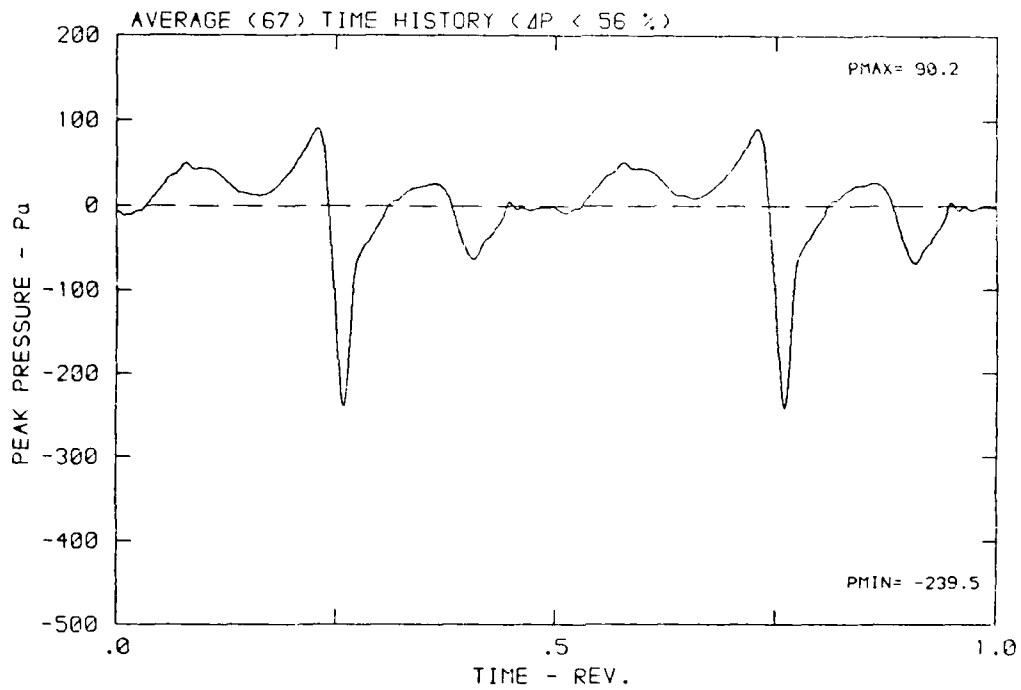
DATA POINT: EC-3 RUN: 132 MP: 5

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



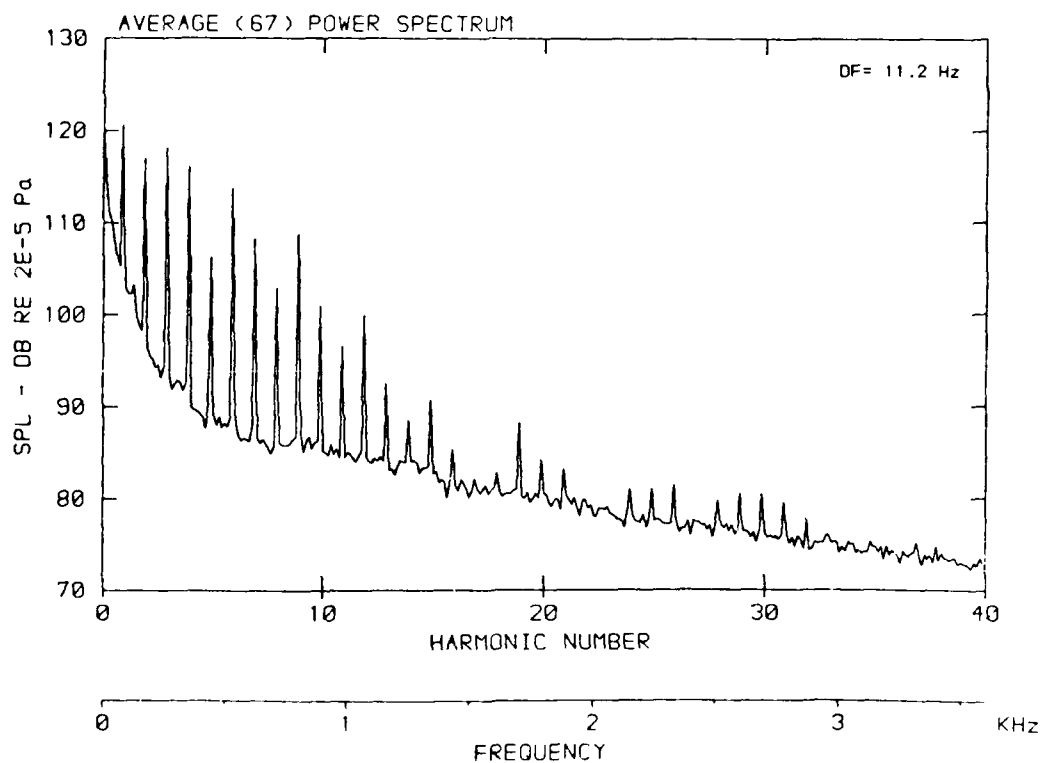
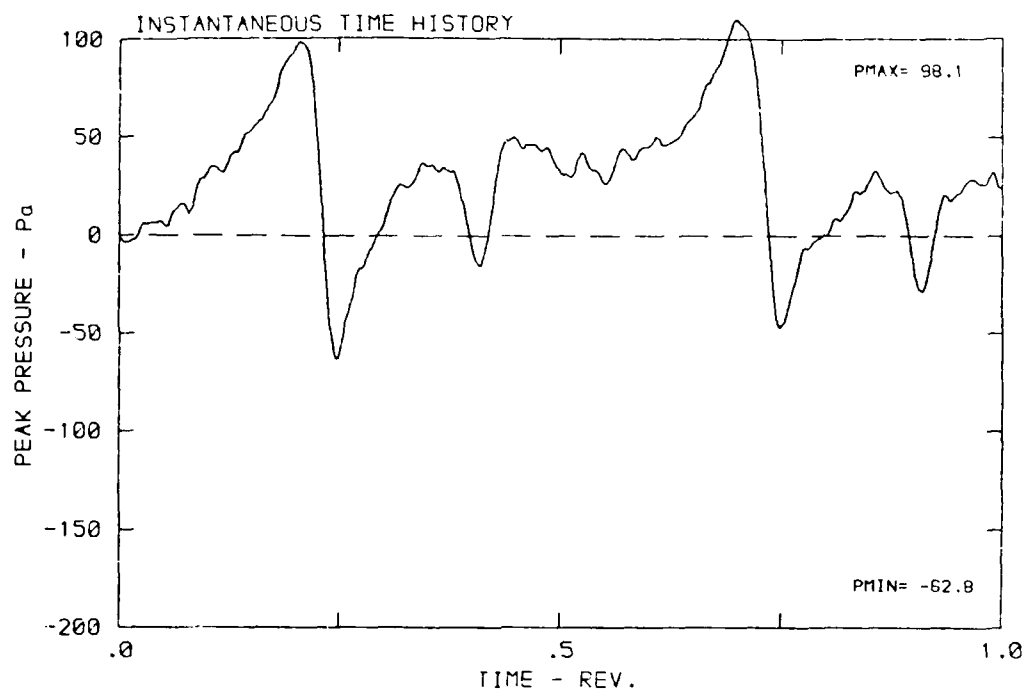
DATA POINT: EC-3 RUN: 132 MP: 5

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



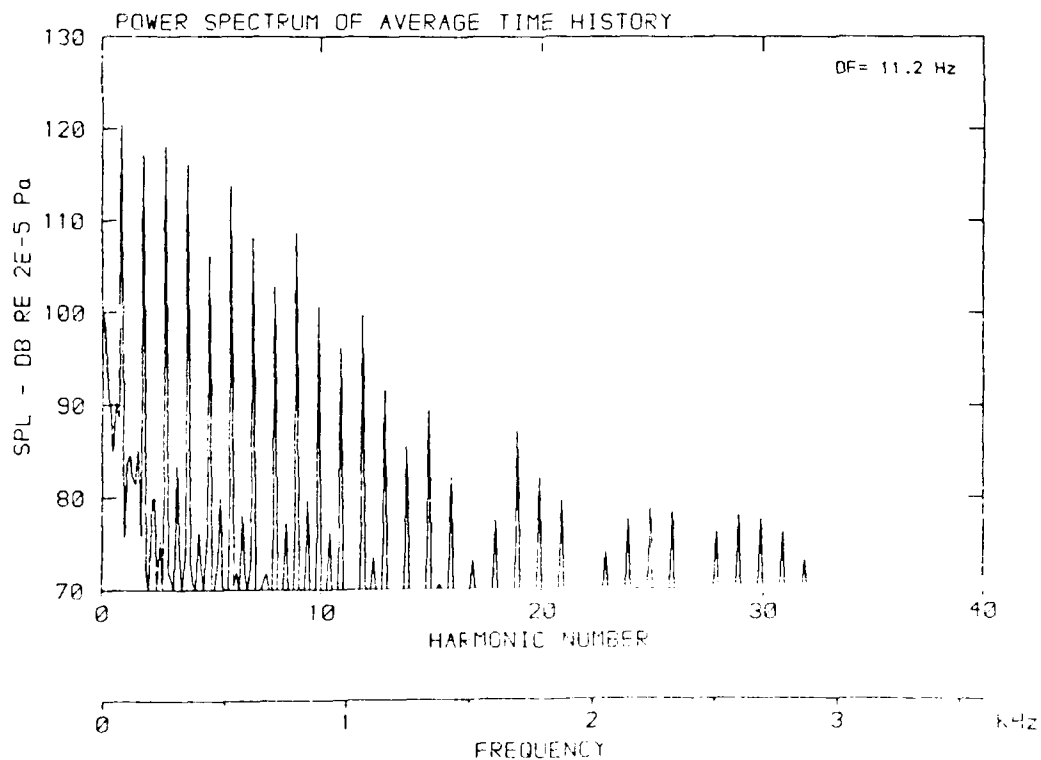
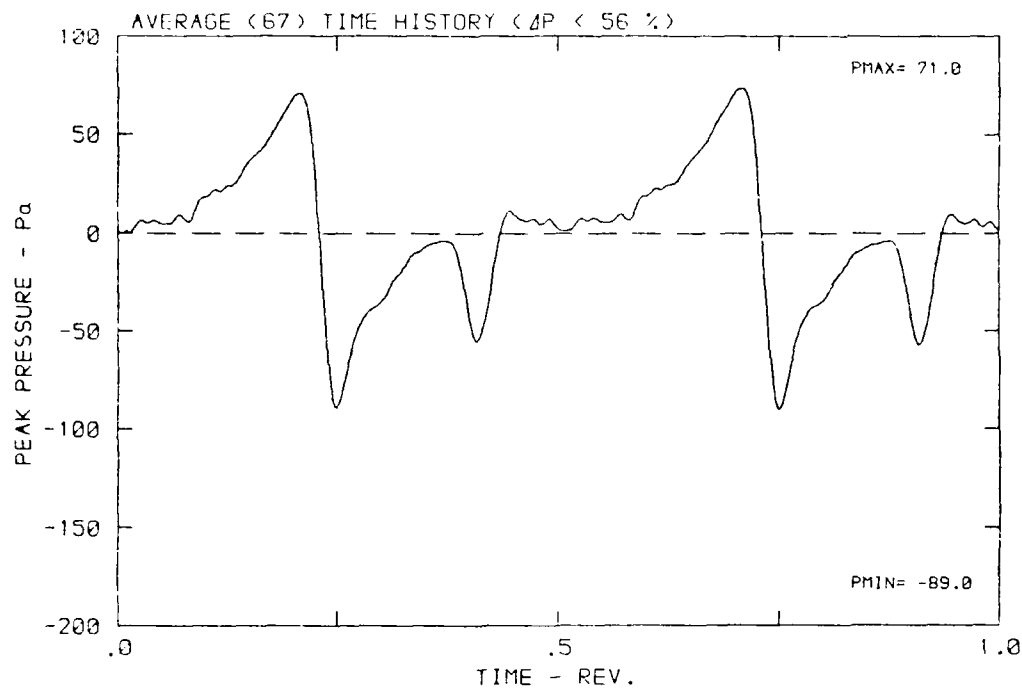
DATA POINT: EC-3 RUN: 132 MP: 6

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K

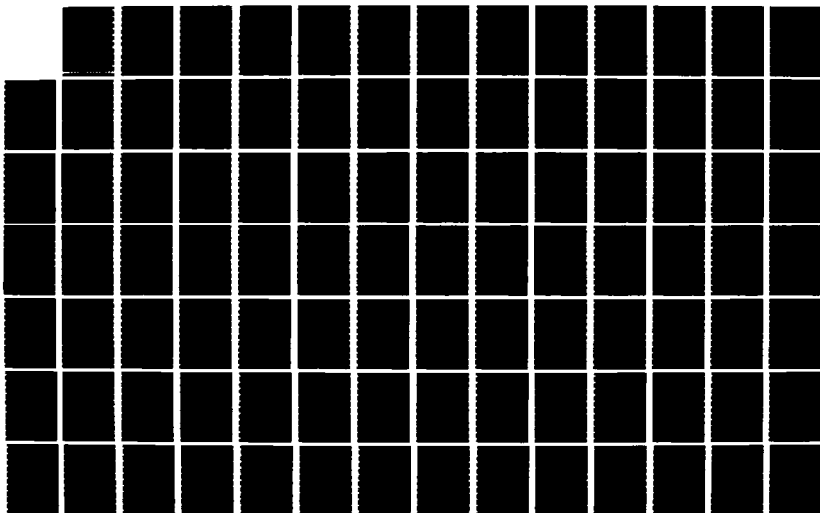


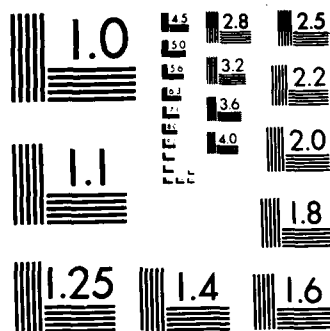
DATA POINT: EC-3 RUN: 132 MP: 6

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



AD-A174 981 DFVLR/FAA (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER 5/6
LUFT UND RAUMFAHR (U) DEUTSCHE FORSCHUNGS- UND
VERSUCHSANSTALT FUER LUFT- UND RAUMF
UNCLASSIFIED W M DOBRZYNSKI ET AL 1986 F/G 20/1 NL

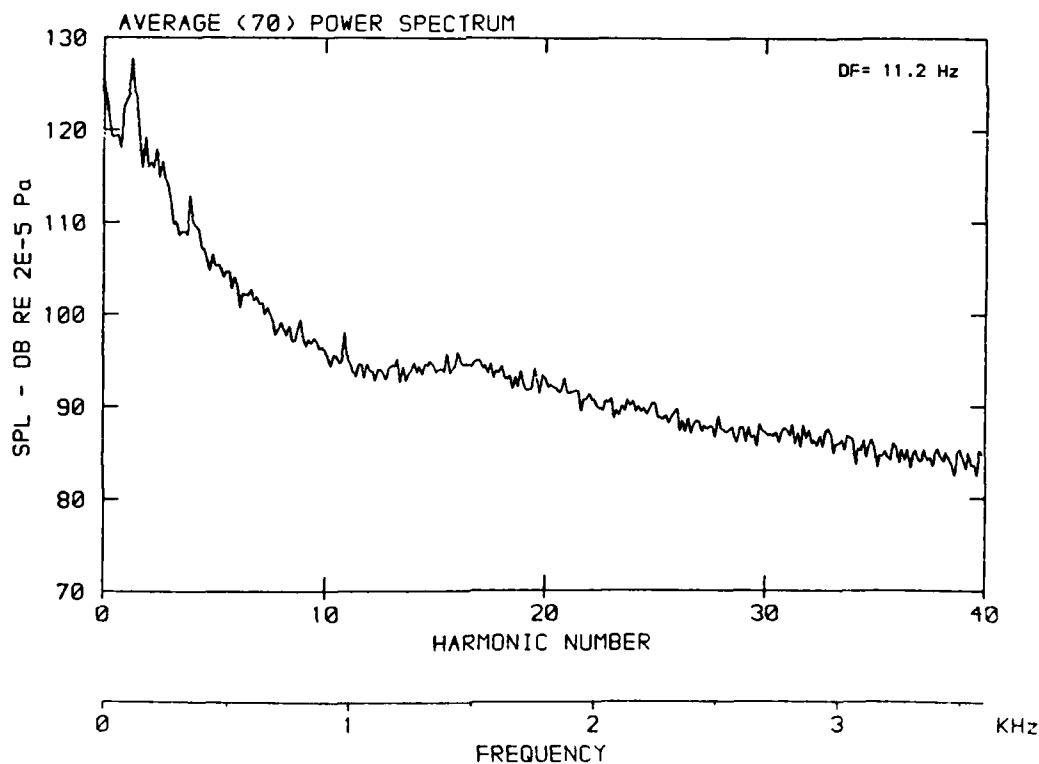
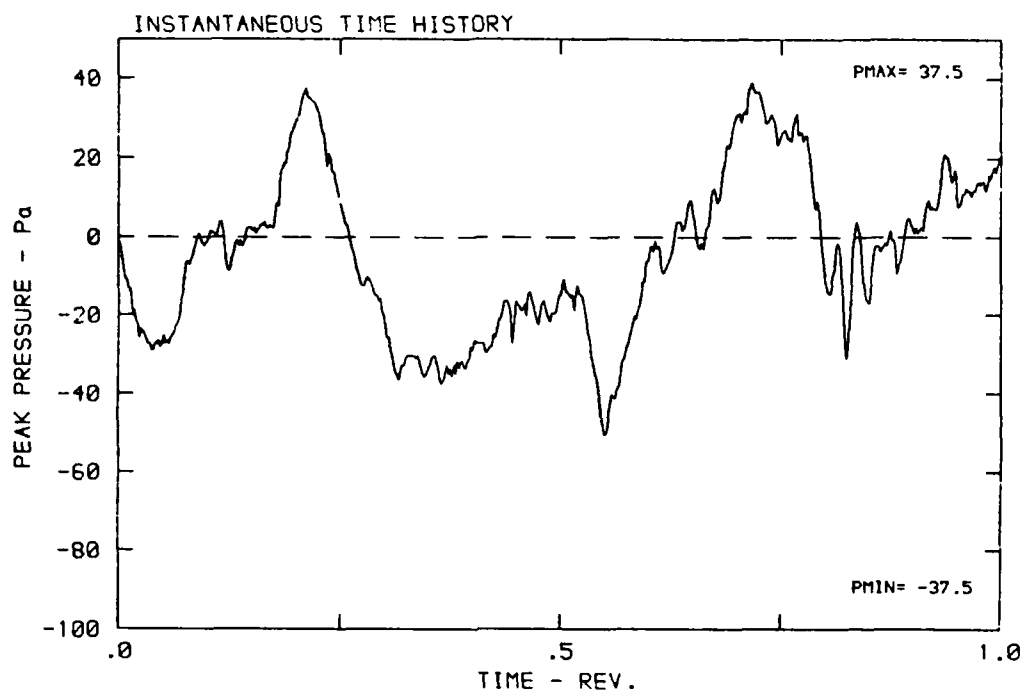




MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

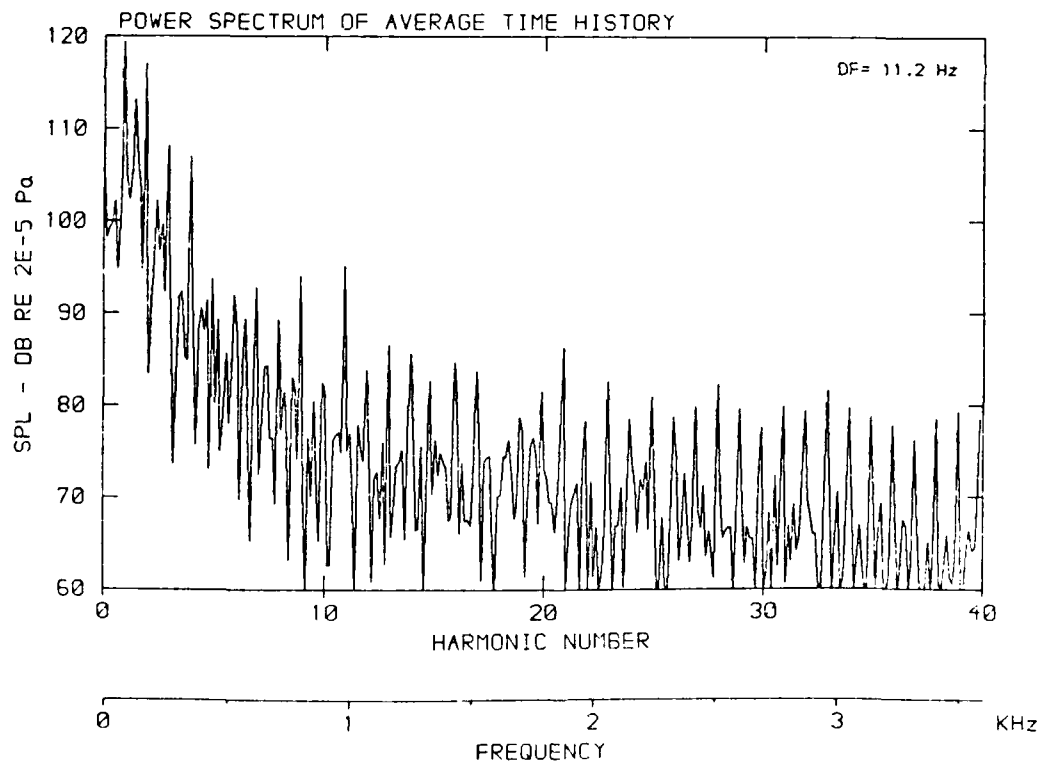
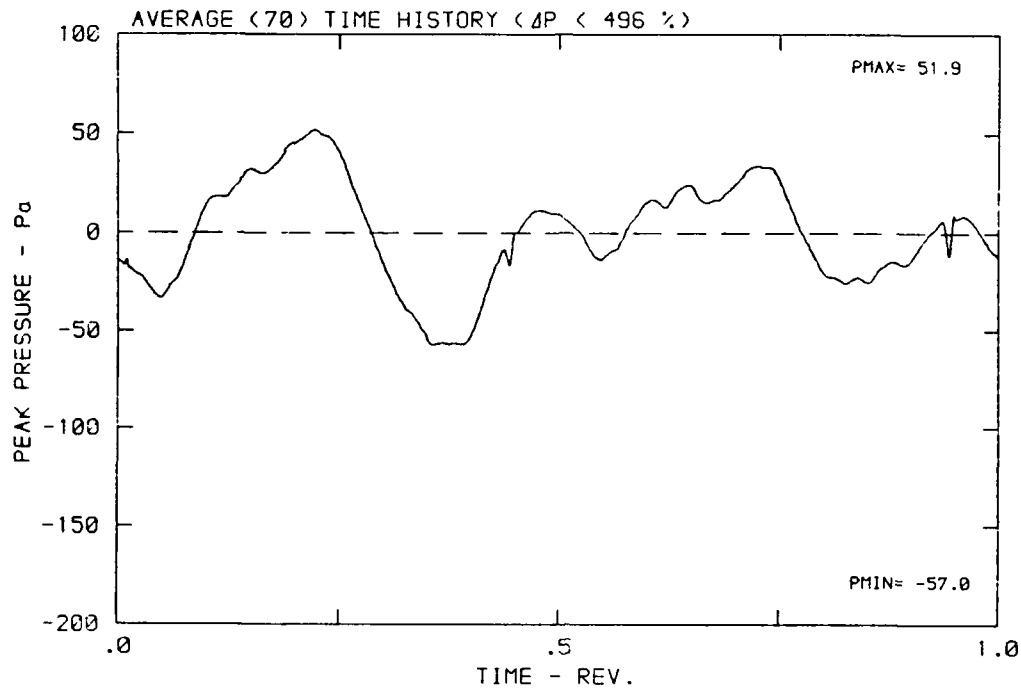
DATA POINT: EC-3 RUN: 132 MP: 7

β : 20.7° MH: .8733 n: 2700 rpm v/u : .268 ϕ : 7.3° T: 288.5 K



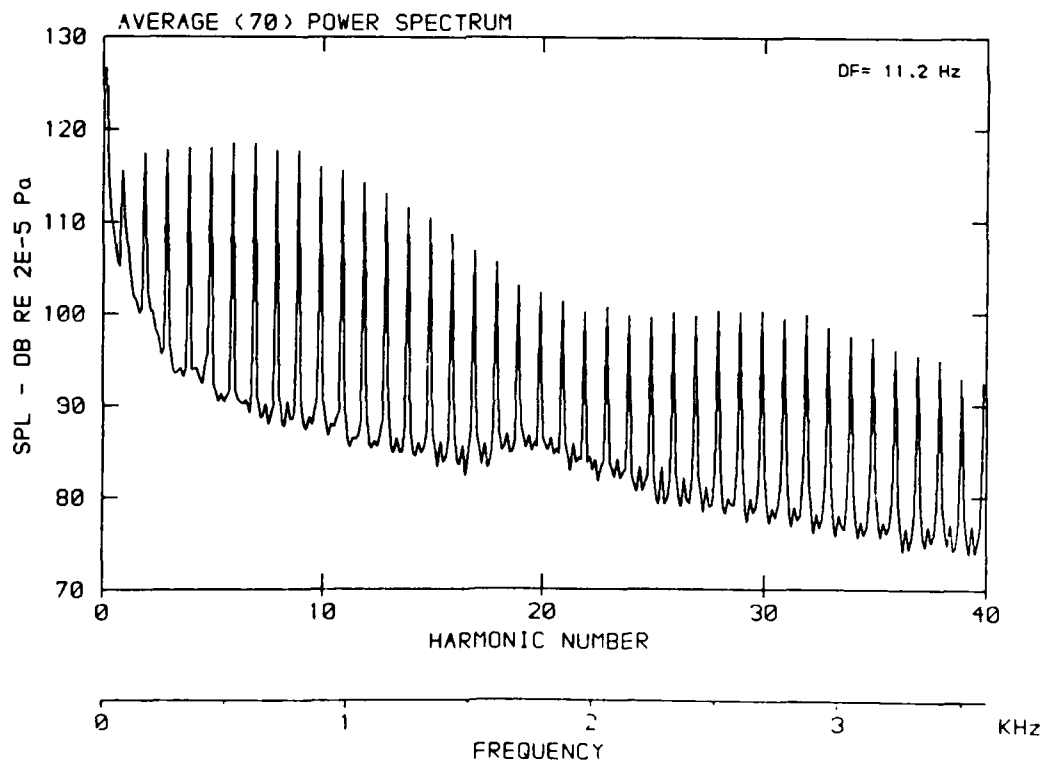
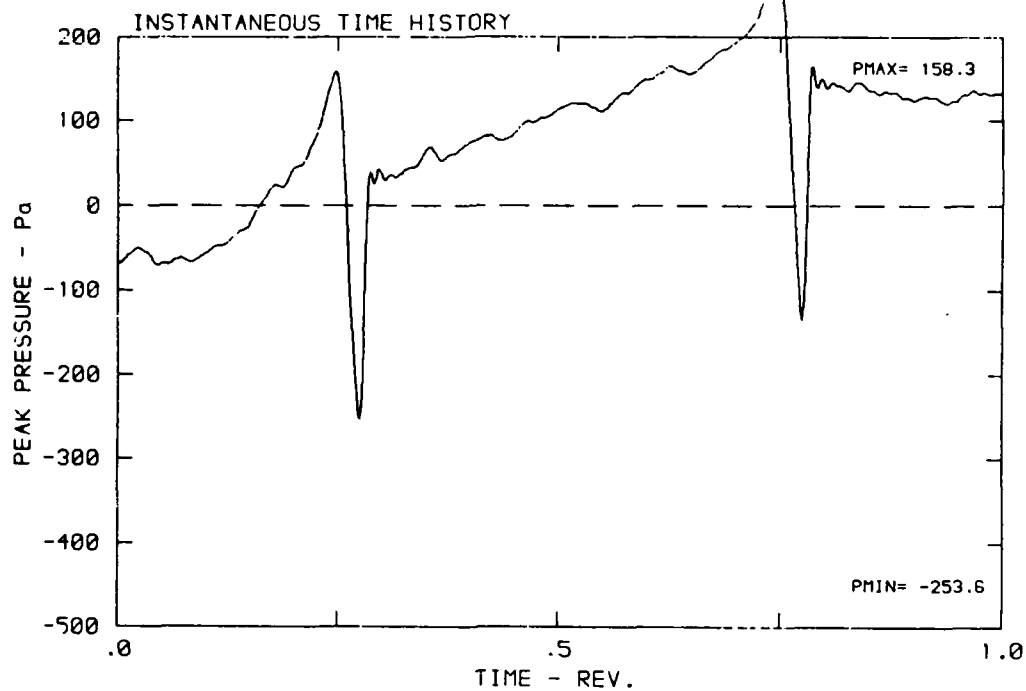
DATA POINT: EC-3 RUN: 132 MP: 7

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



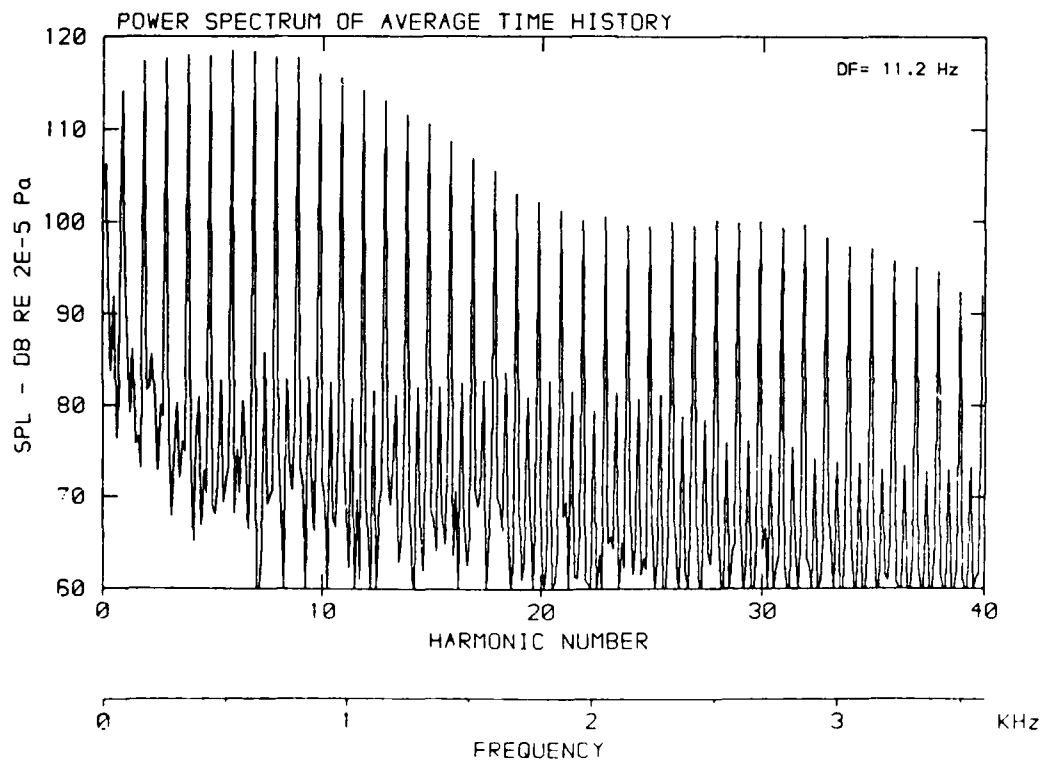
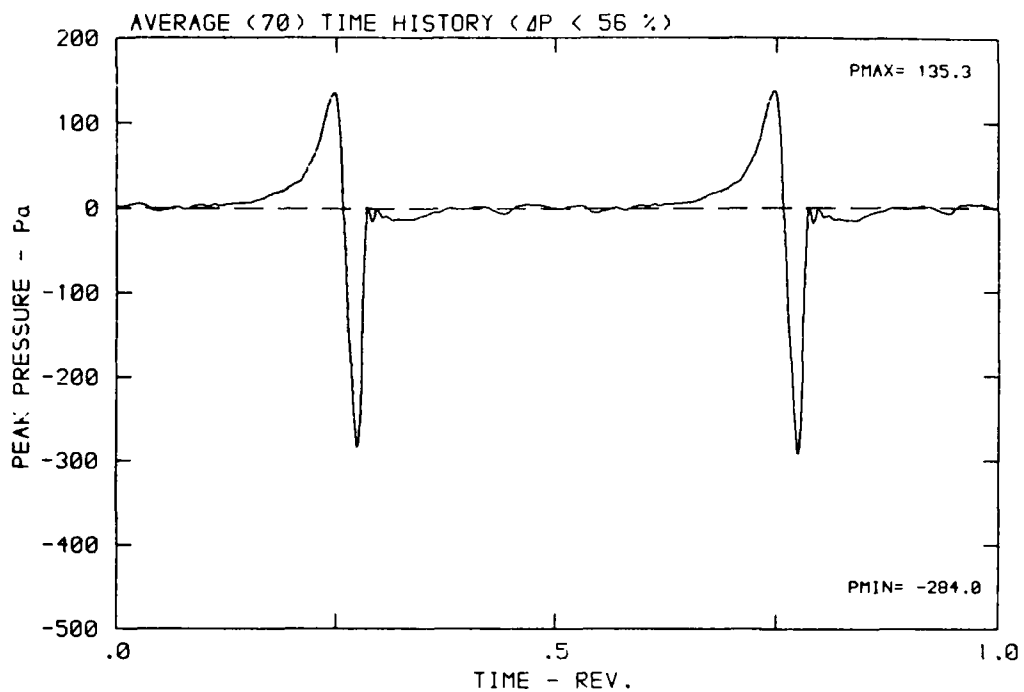
DATA POINT: EC-3 RUN: 132 MP: 8

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



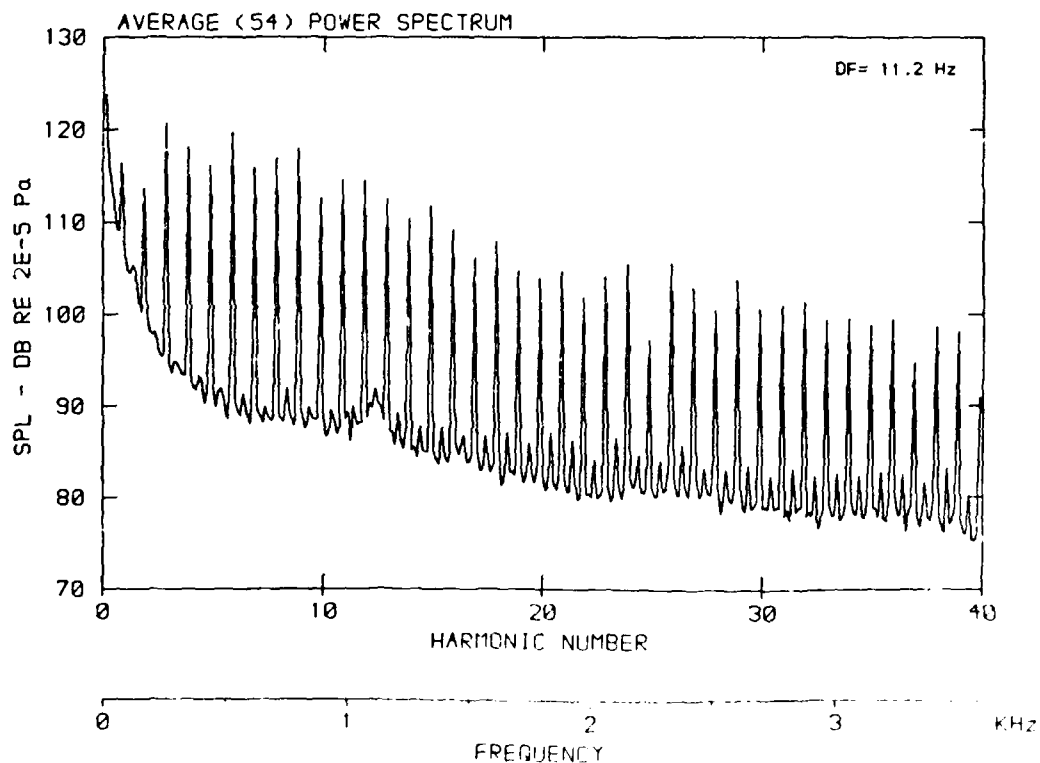
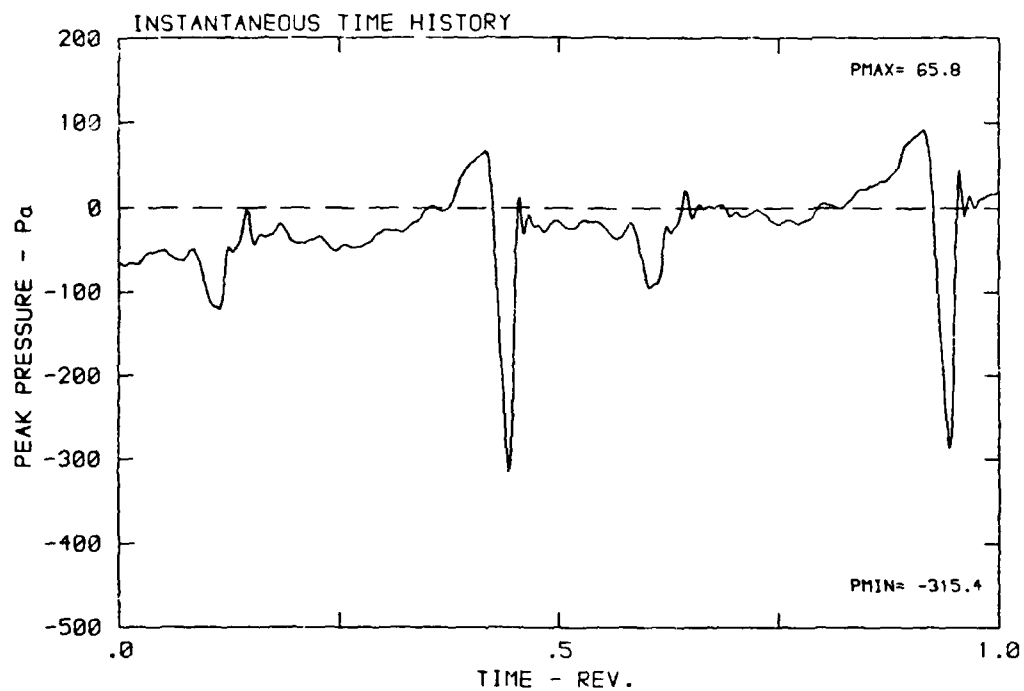
DATA POINT: EC-3 RUN: 132 MP: 8

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



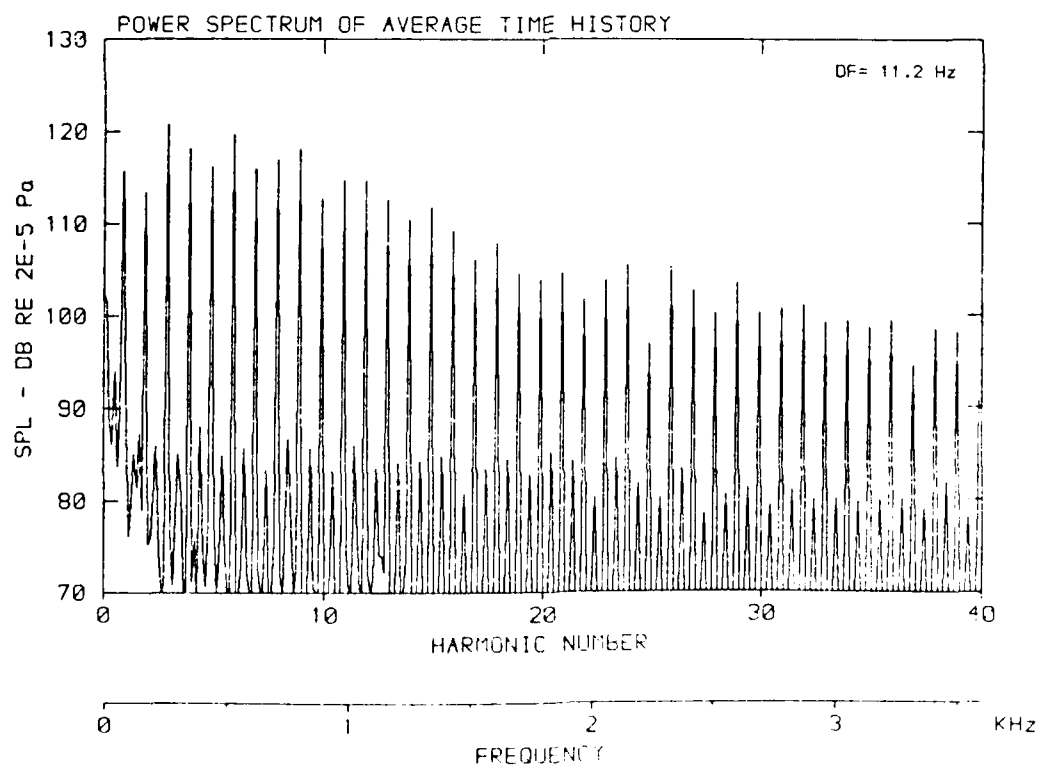
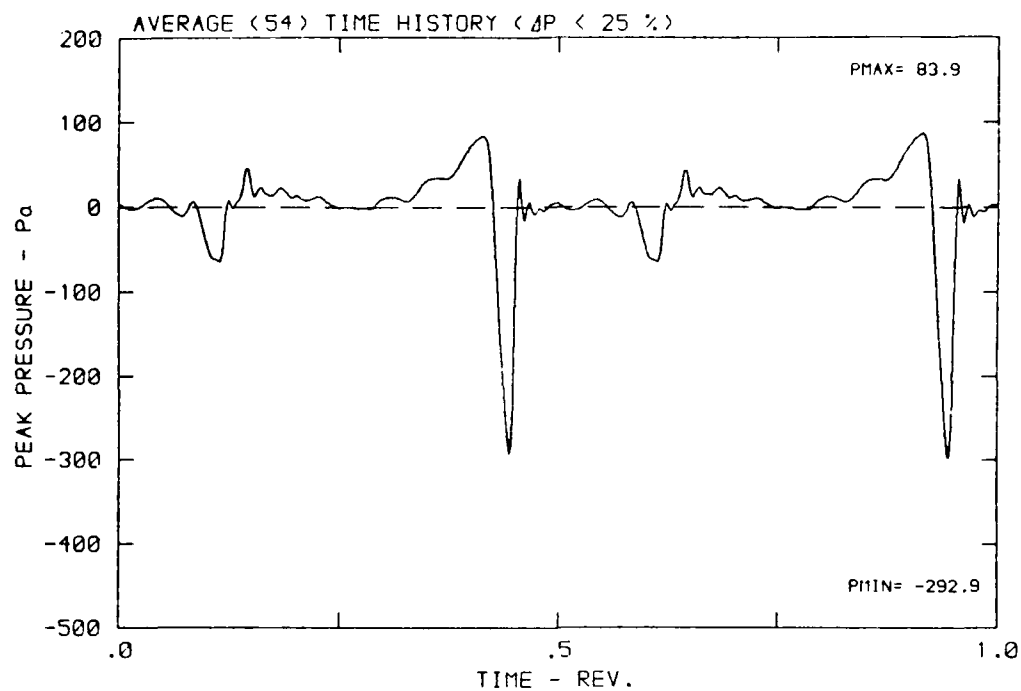
DATA POINT: EC-3 RUN: 132 MP: 9

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



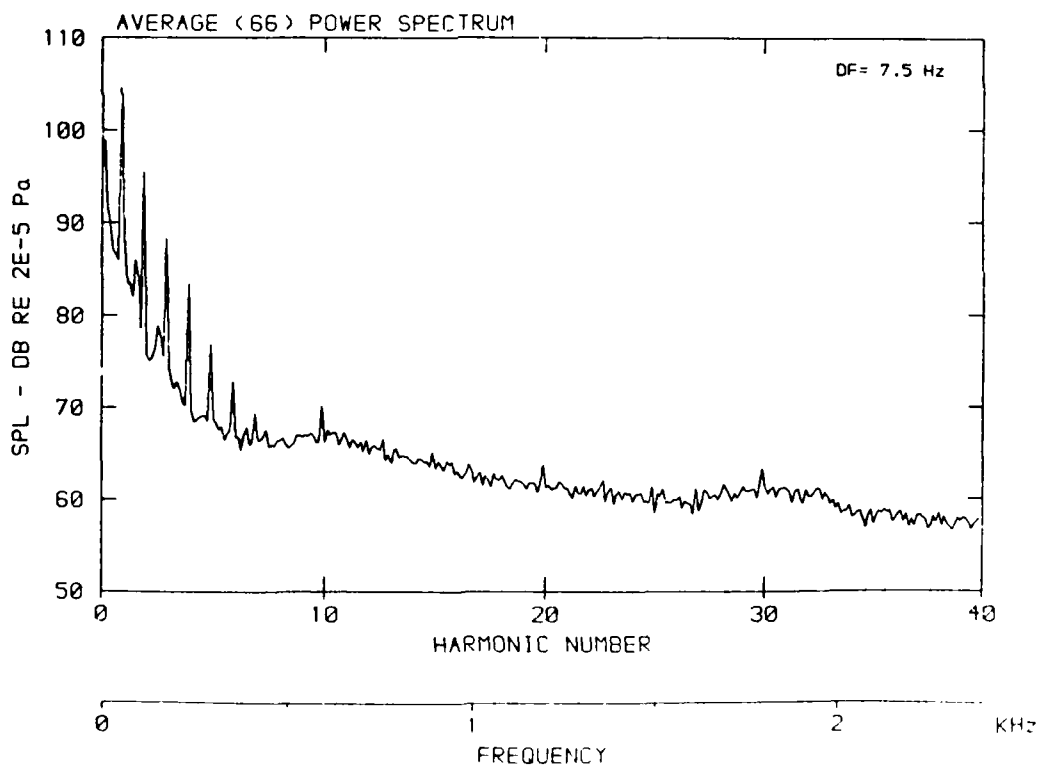
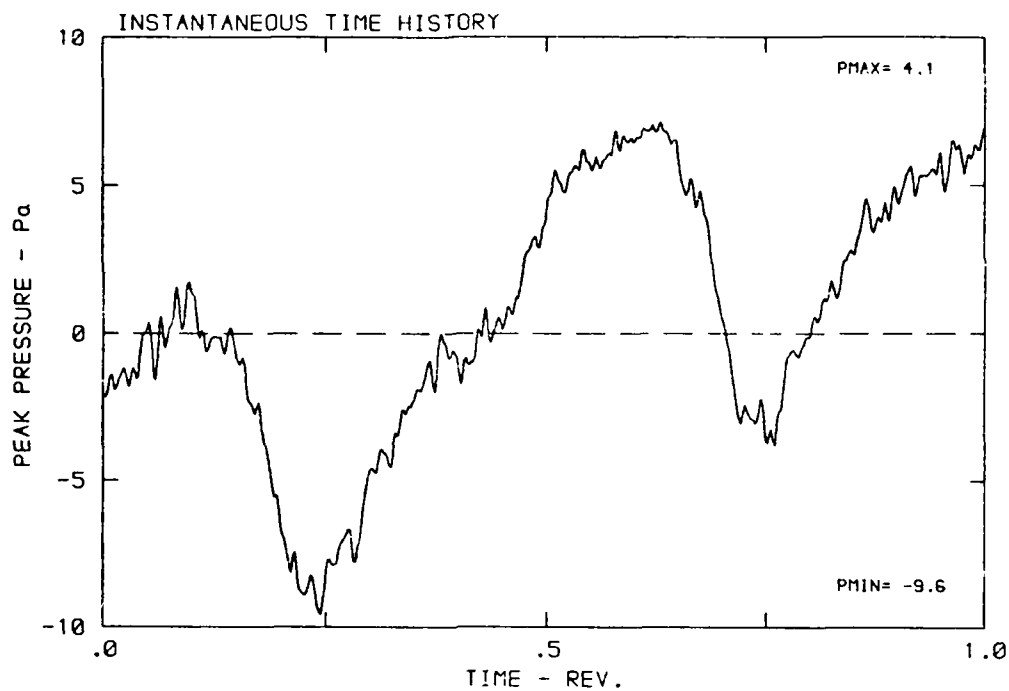
DATA POINT: EC-3 RUN: 132 MP: 9

β : 20.7° MH: .8733 n: 2700 rpm v/u: .268 ϕ : 7.3° T: 288.5 K



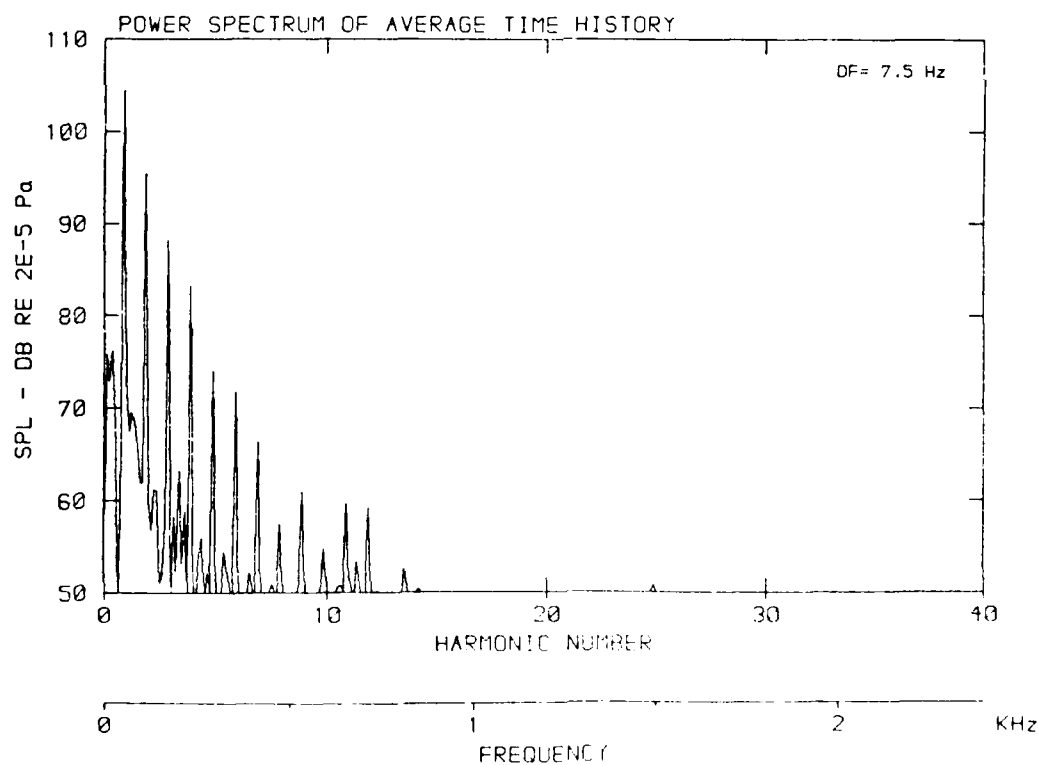
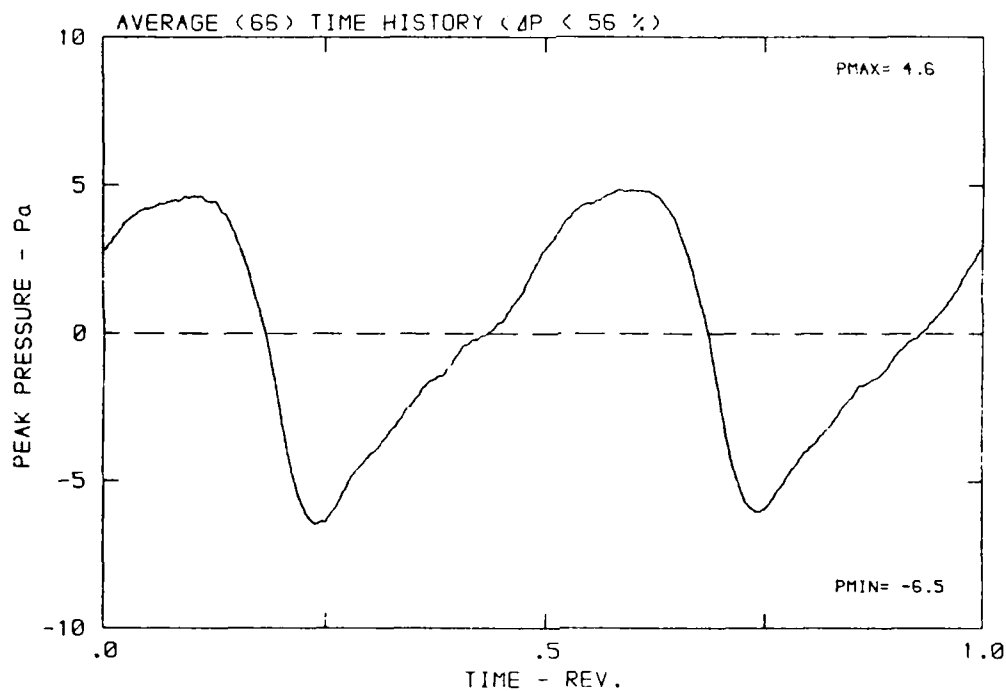
DATA POINT: EC-4 RUN: 133 MP: 1

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



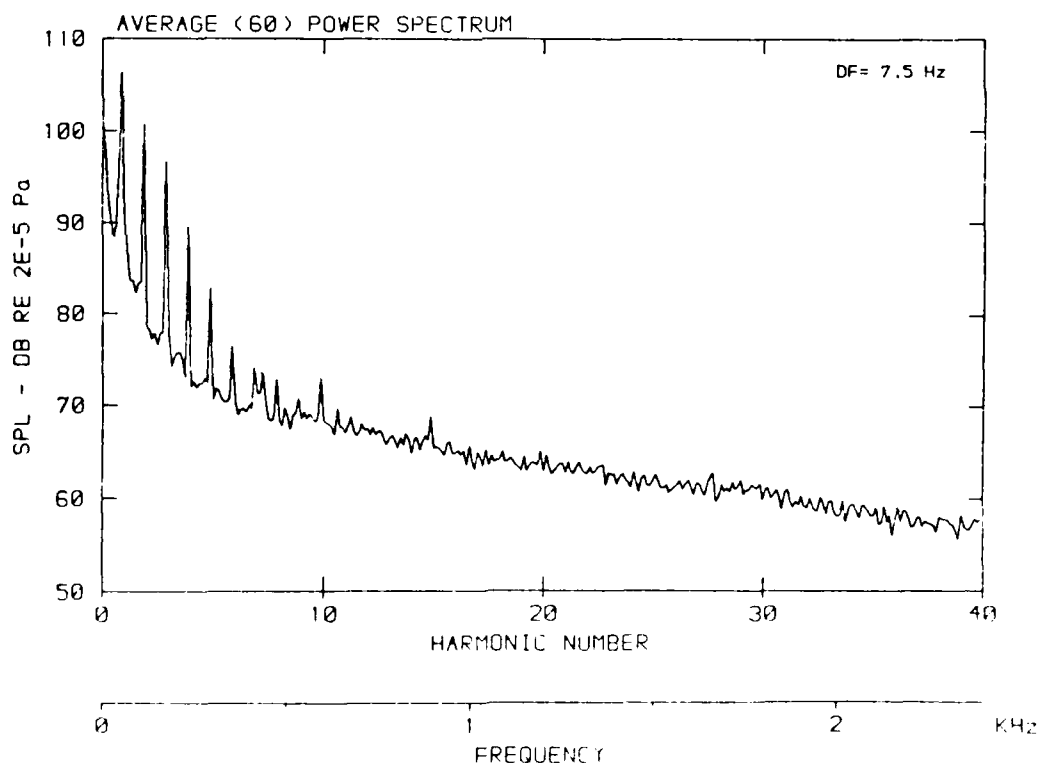
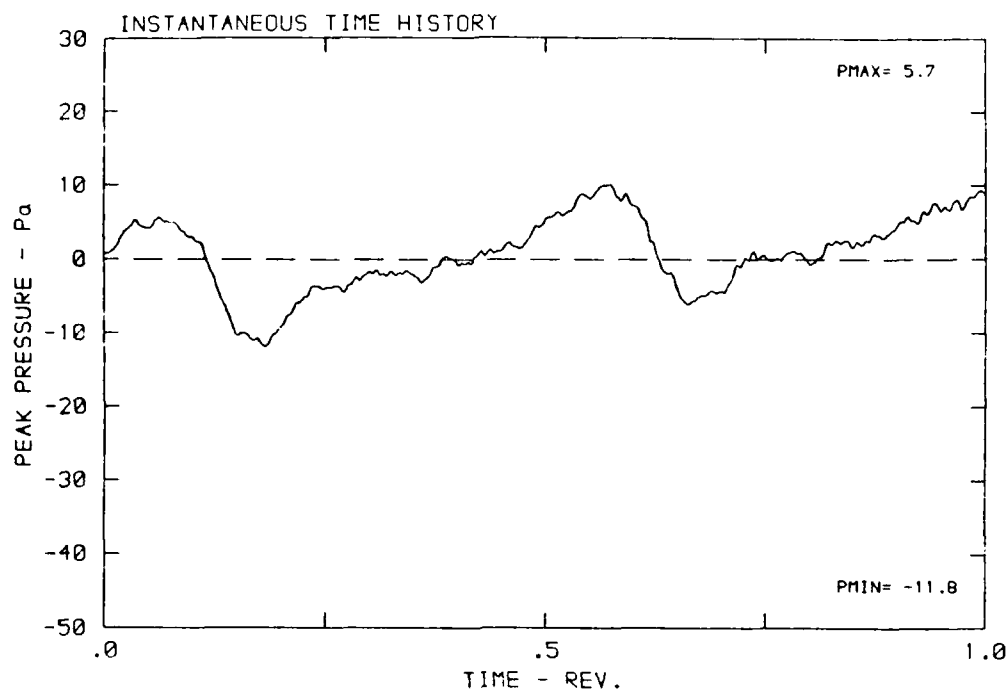
DATA POINT: EC-4 RUN: 133 MP: 1

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



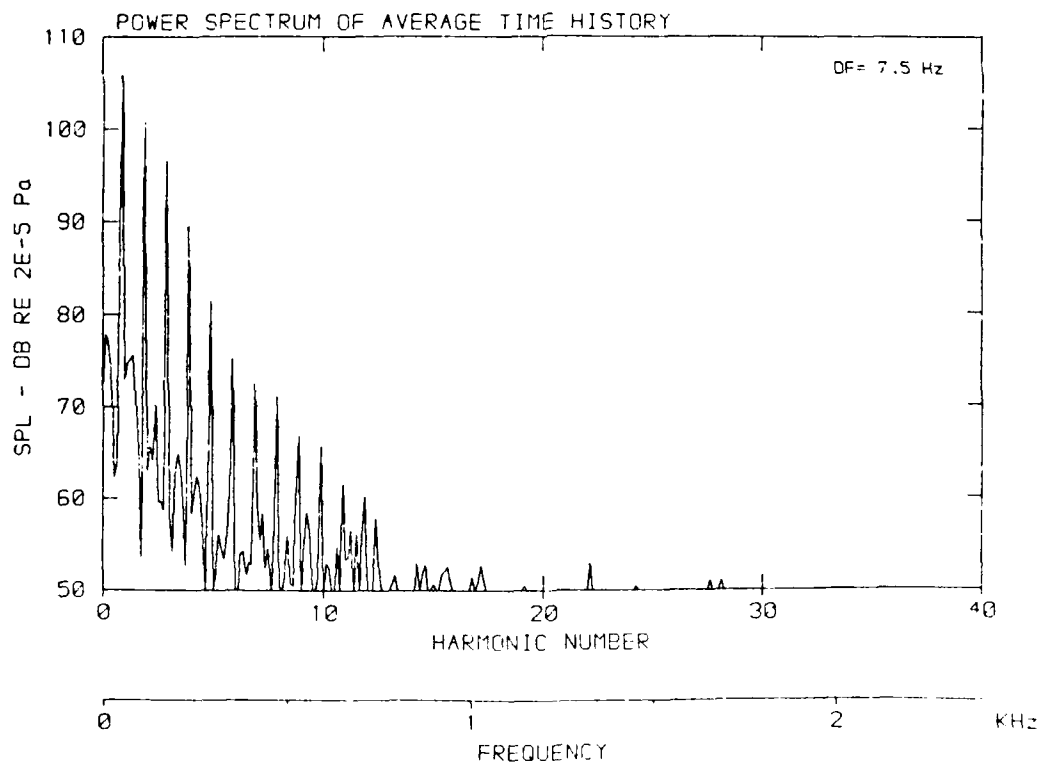
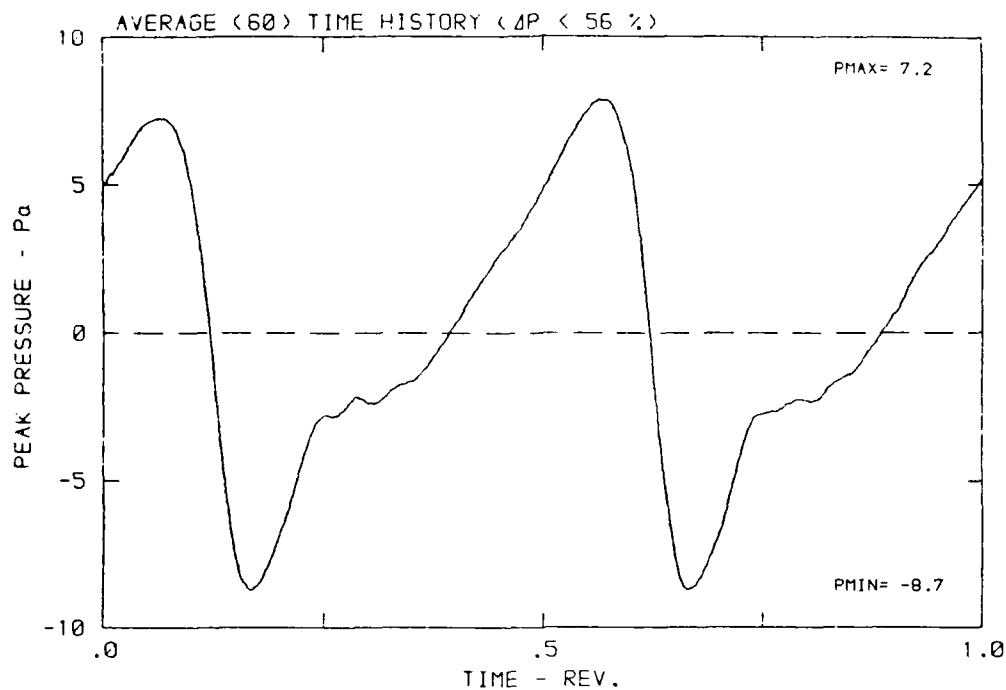
DATA POINT: EC-4 RUN: 133 MP: 2

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



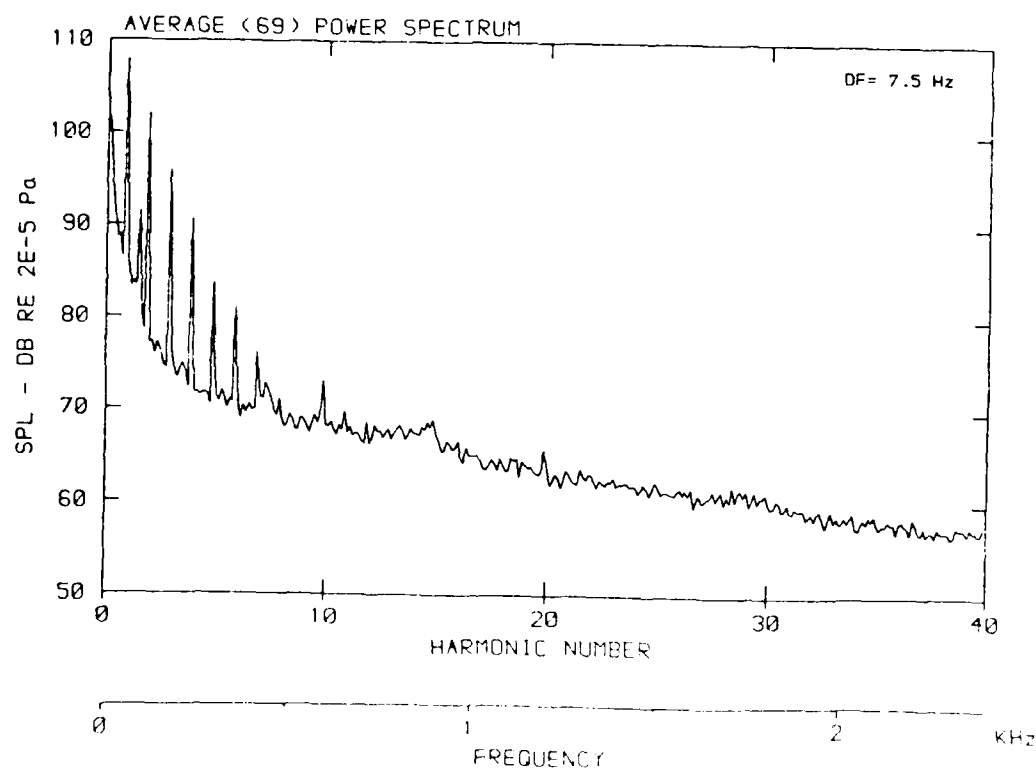
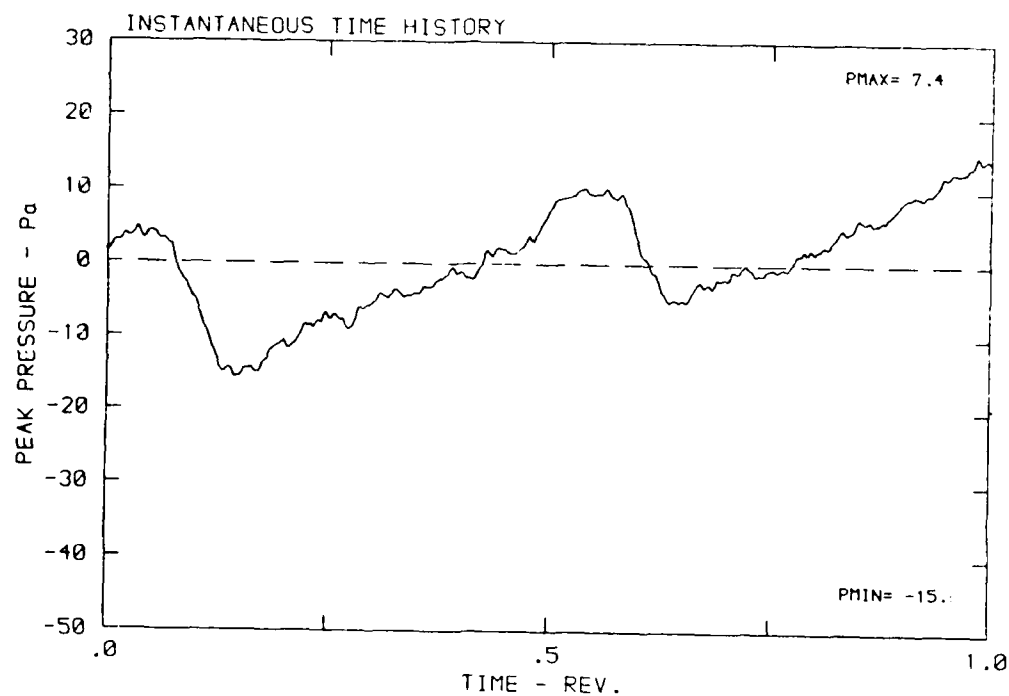
DATA POINT: EC-4 RUN: 133 MP: 2

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



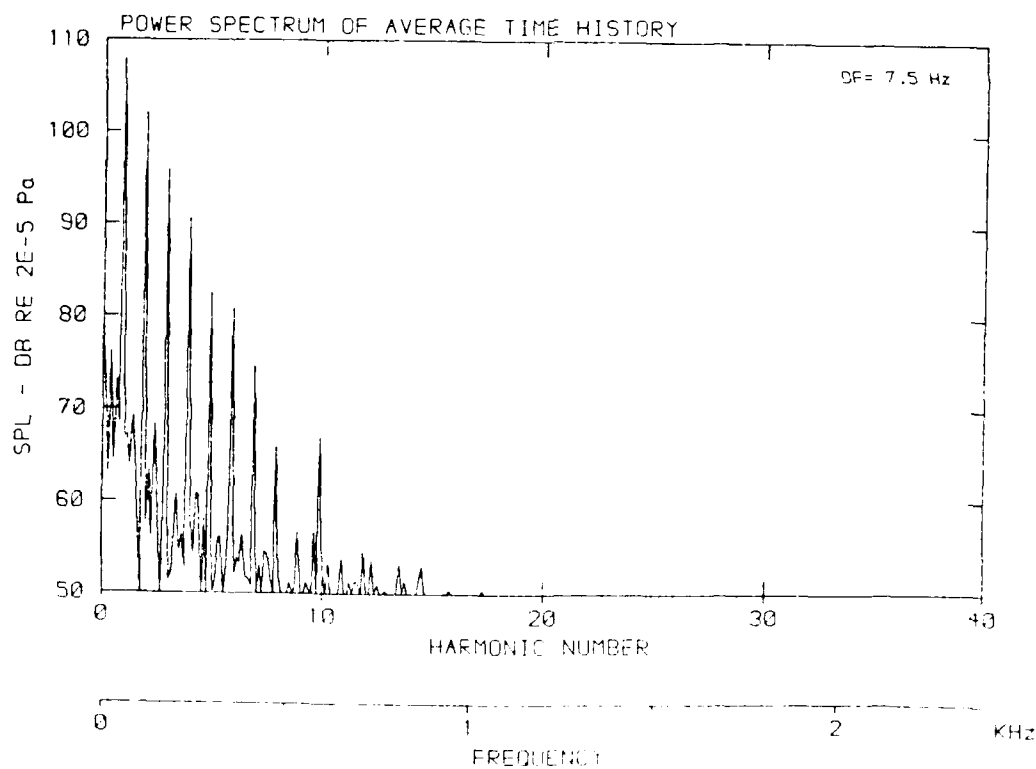
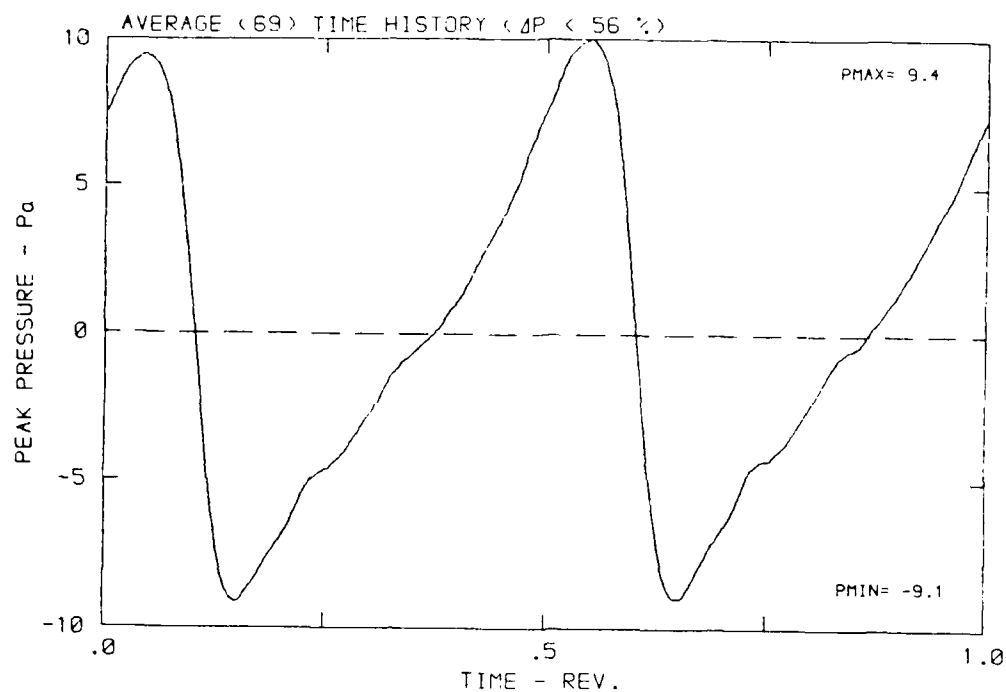
DATA POINT: EC-4 RUN: 133 MP: 3

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



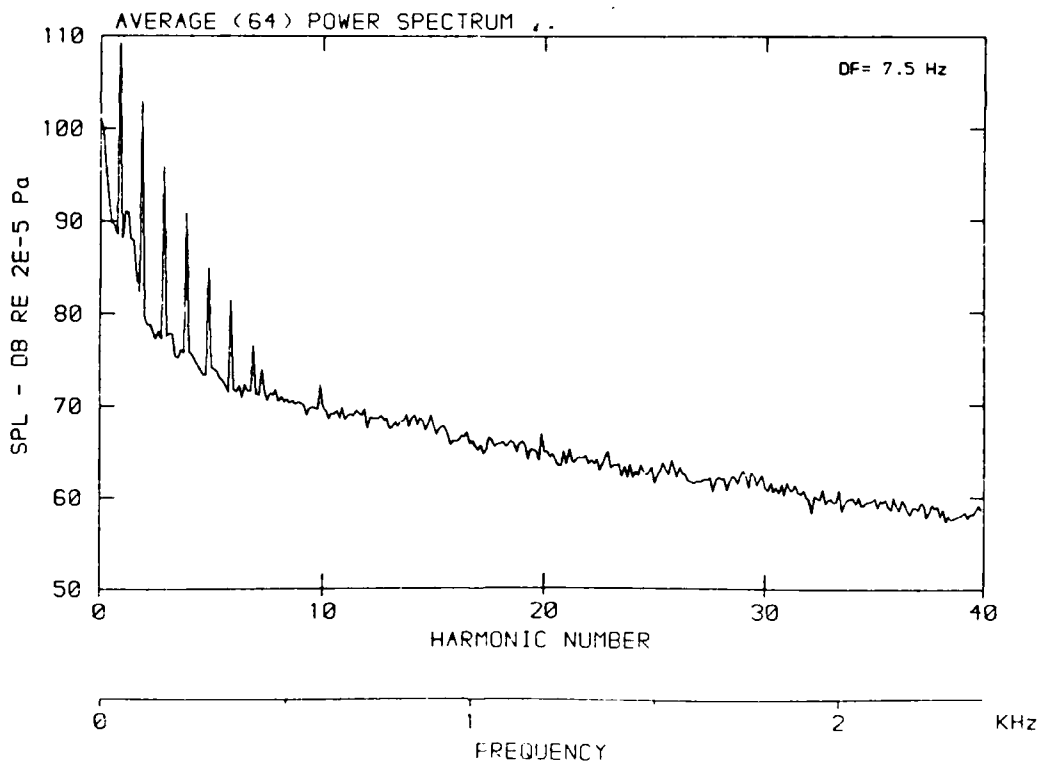
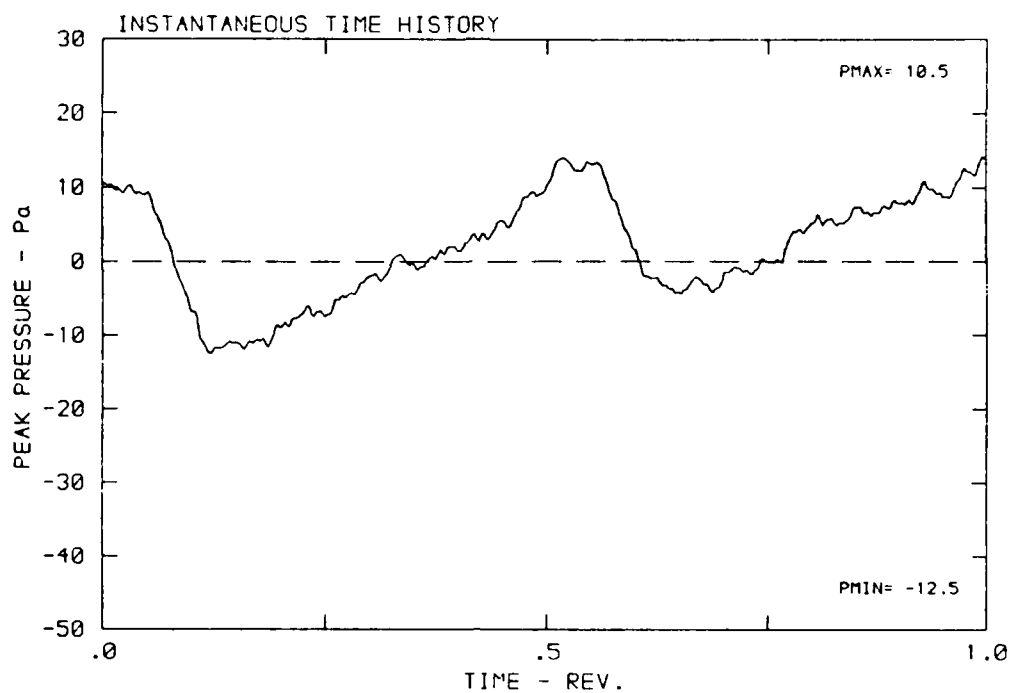
DATA POINT: EC-4 RUN: 133 MP: 3

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



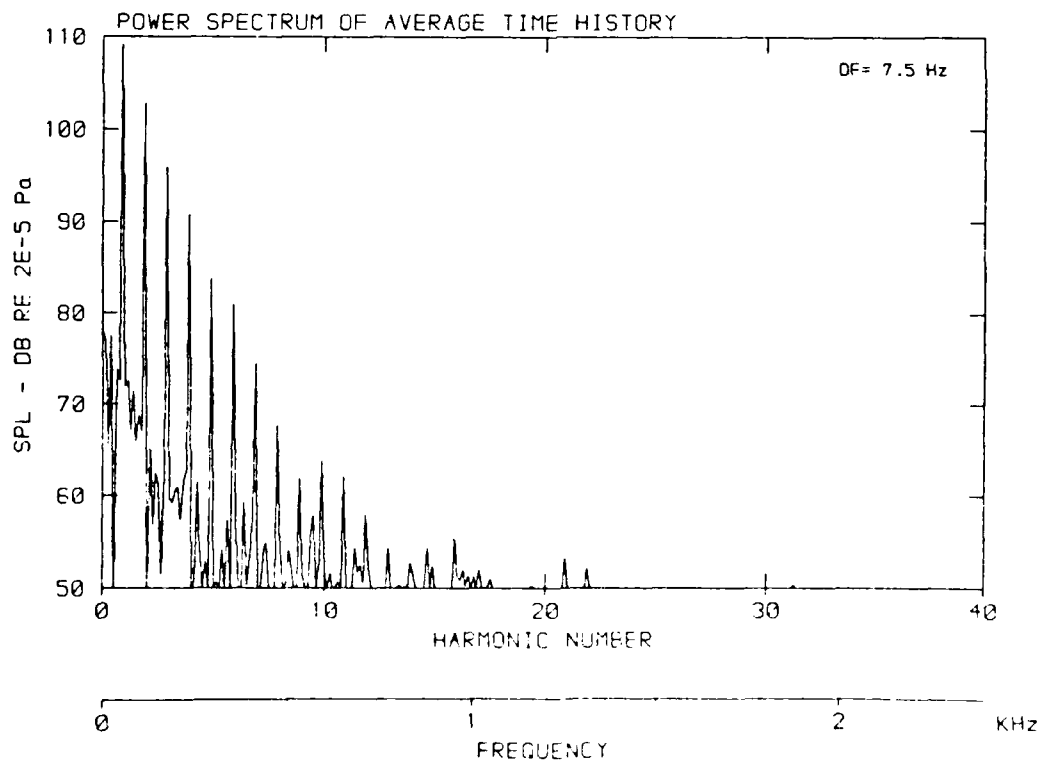
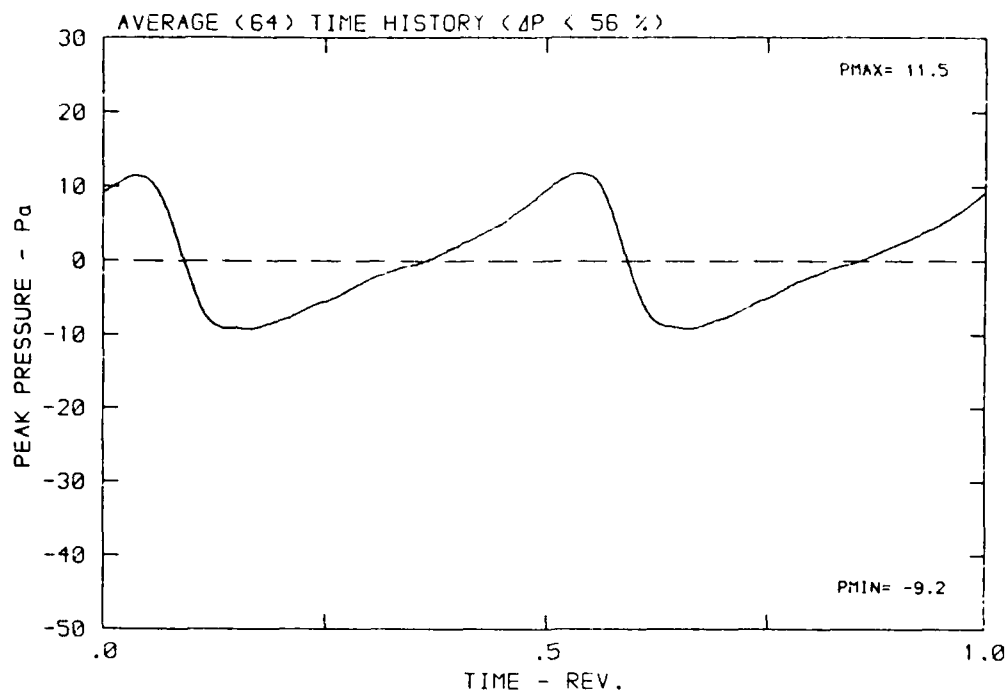
DATA POINT: EC-4 RUN: 133 MP: 4

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



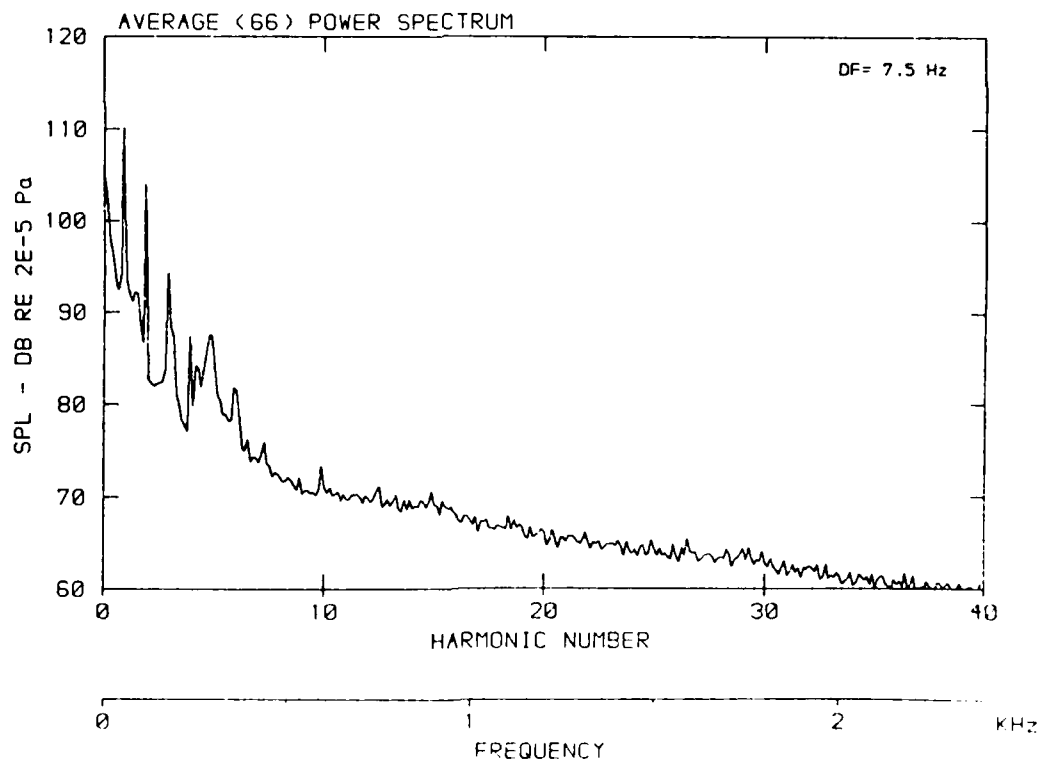
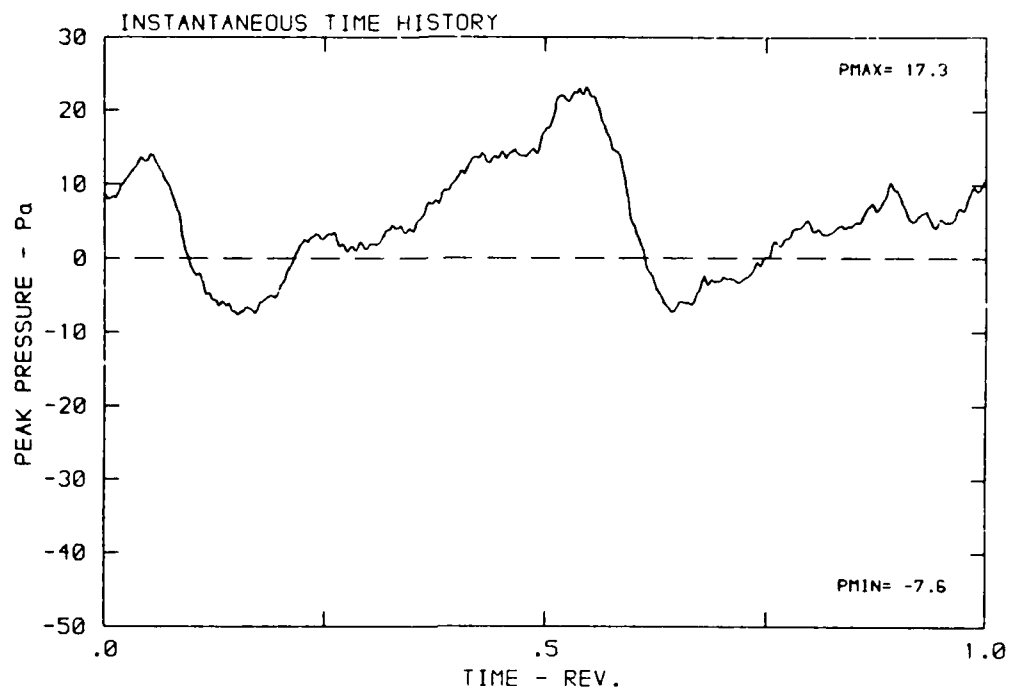
DATA POINT: EC-4 RUN: 133 MP: 4

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



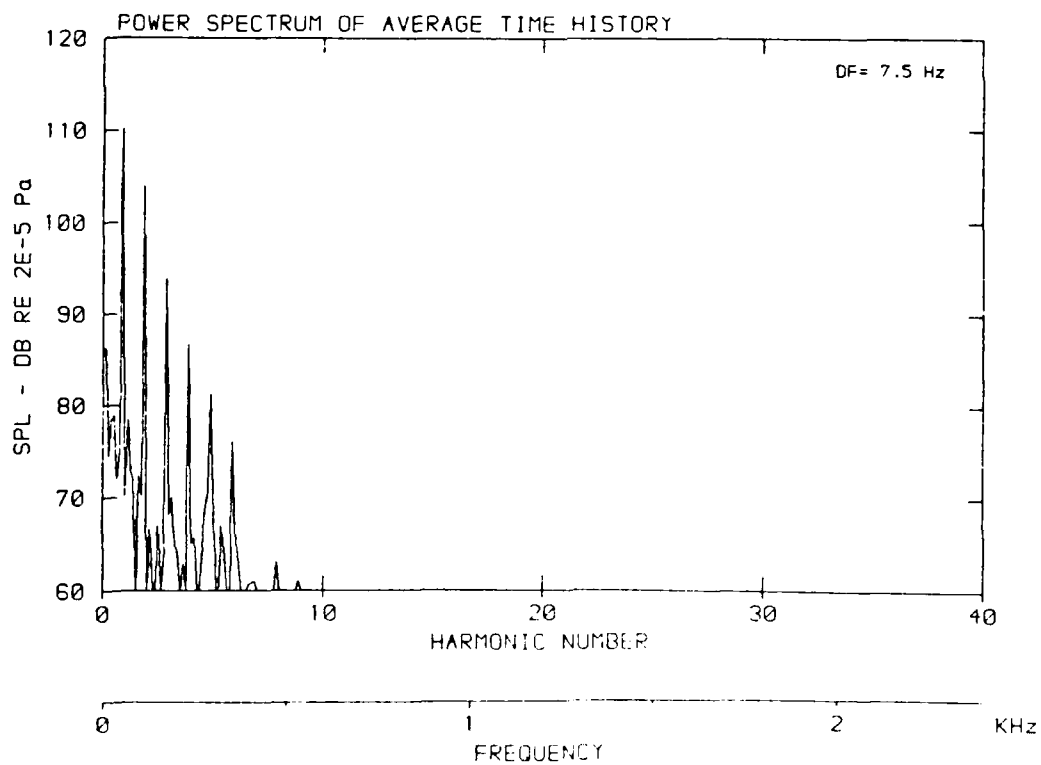
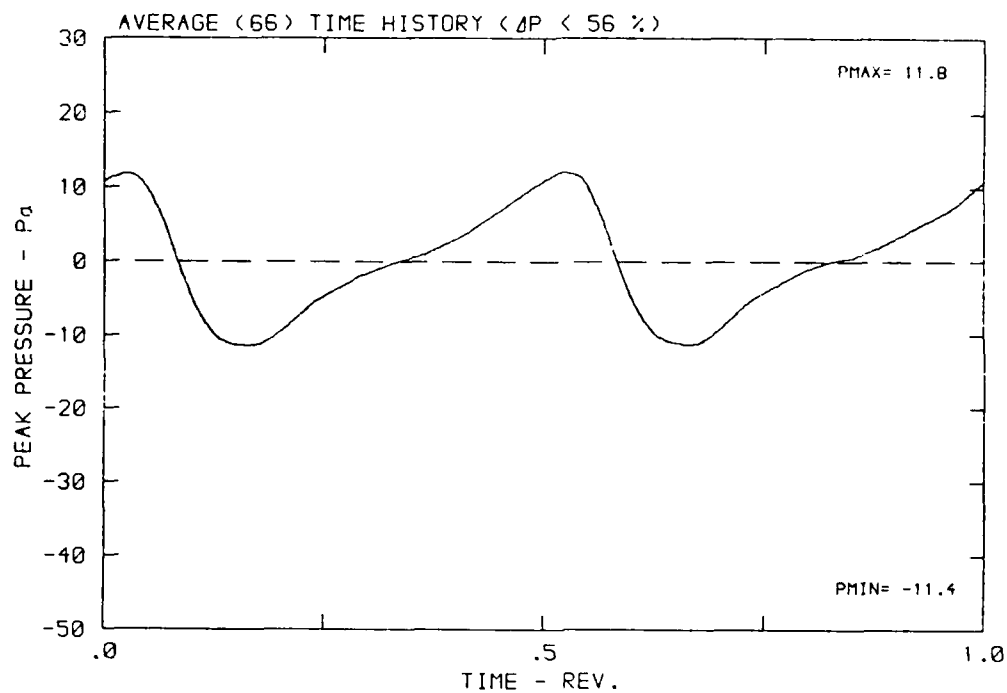
DATA POINT: EC-4 RUN: 133 MP: 5

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



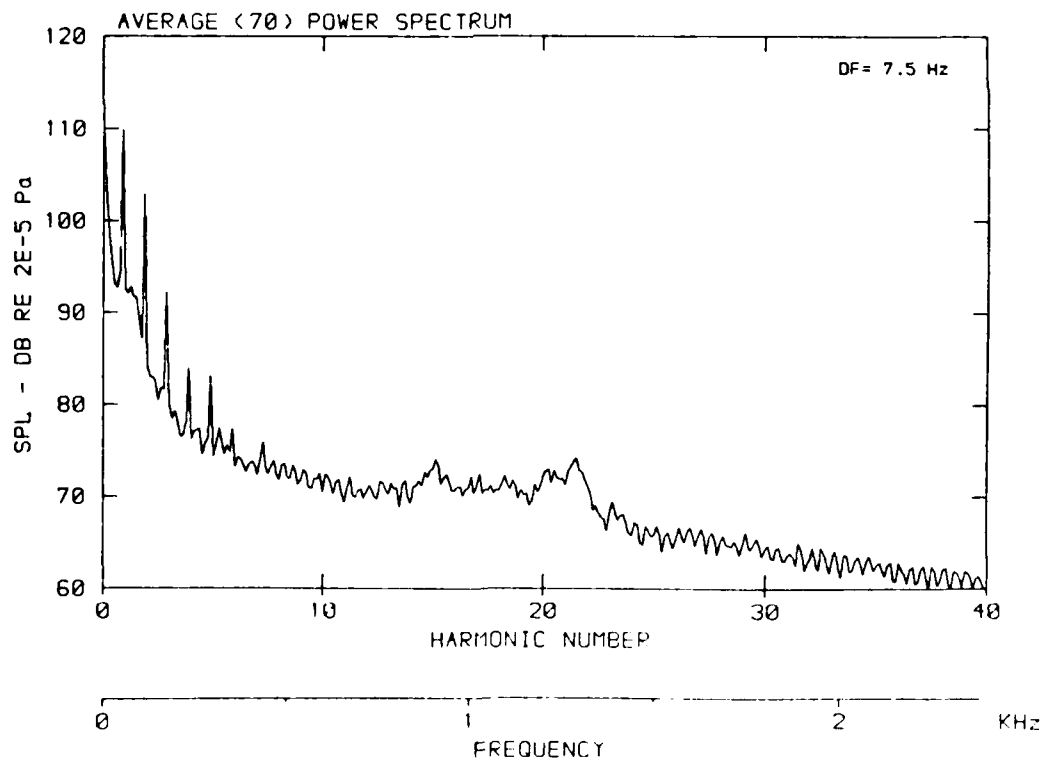
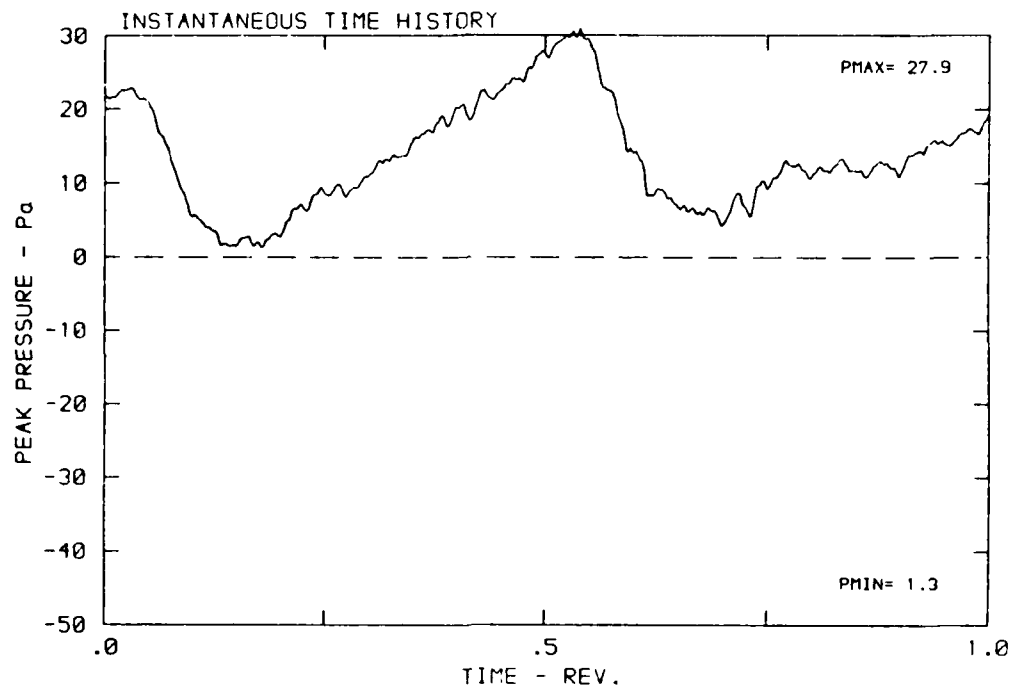
DATA POINT: EC-4 RUN: 133 MP: 5

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



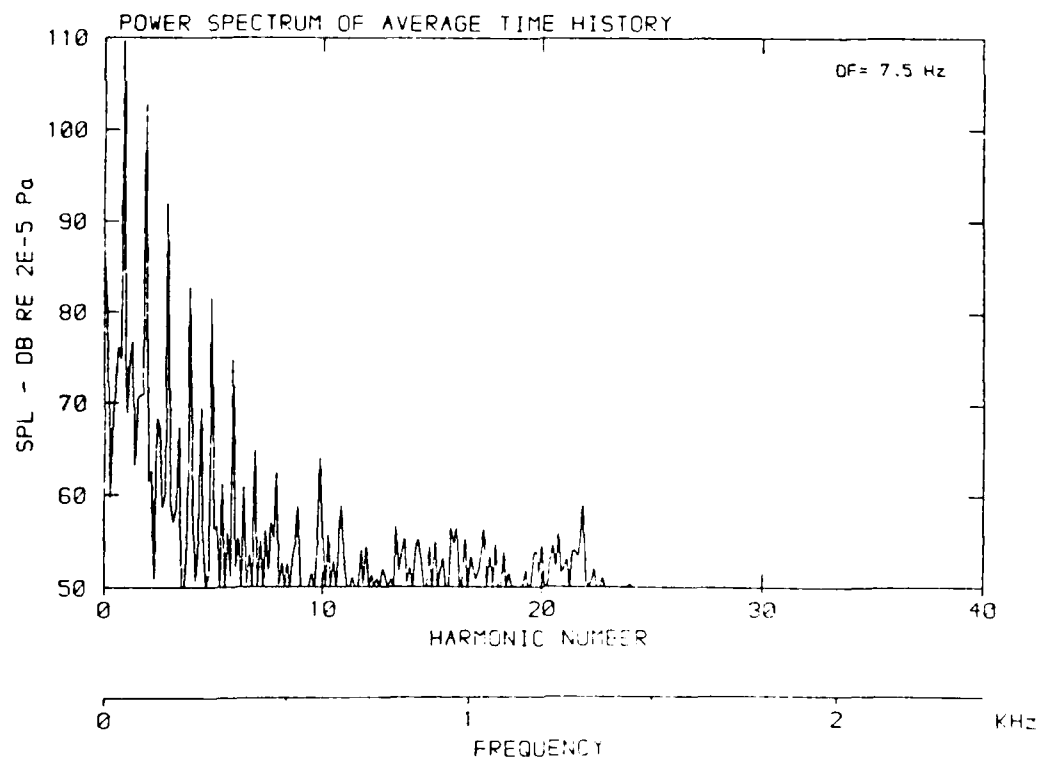
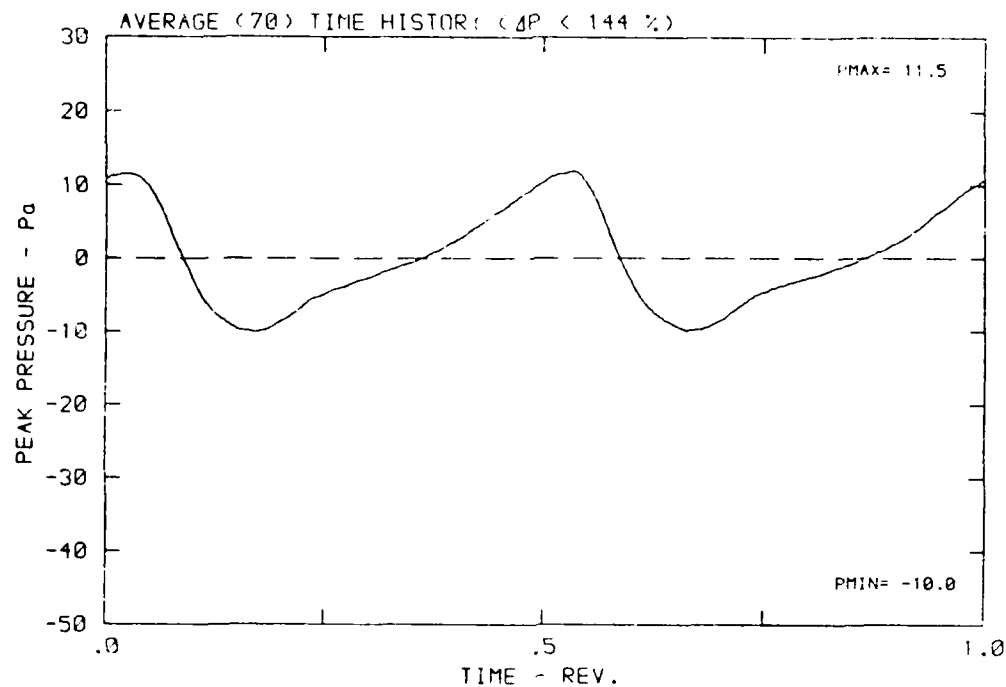
DATA POINT: EC-4 RUN: 133 MP: 6

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



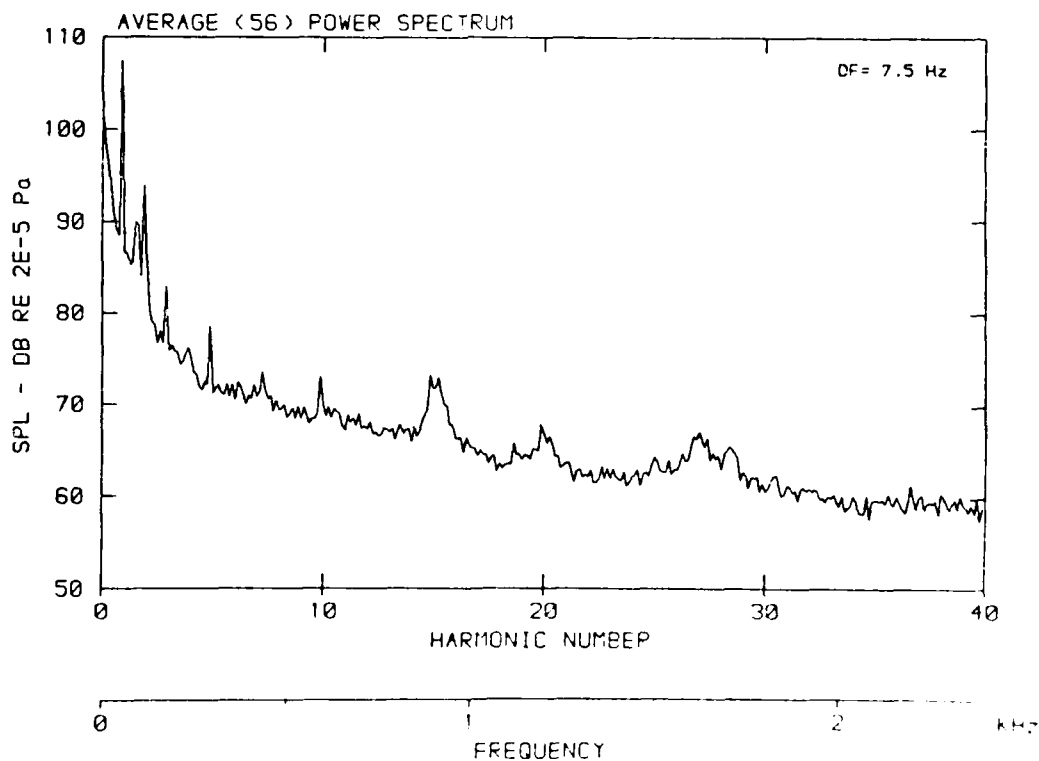
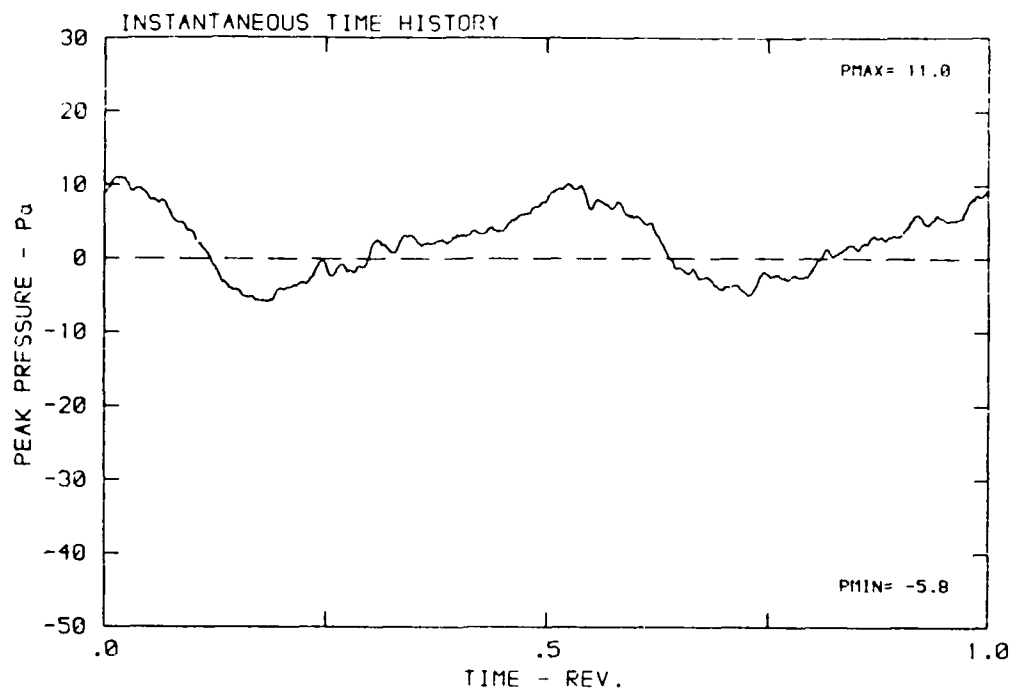
DATA POINT: EC-4 RUN: 133 MP: 6

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



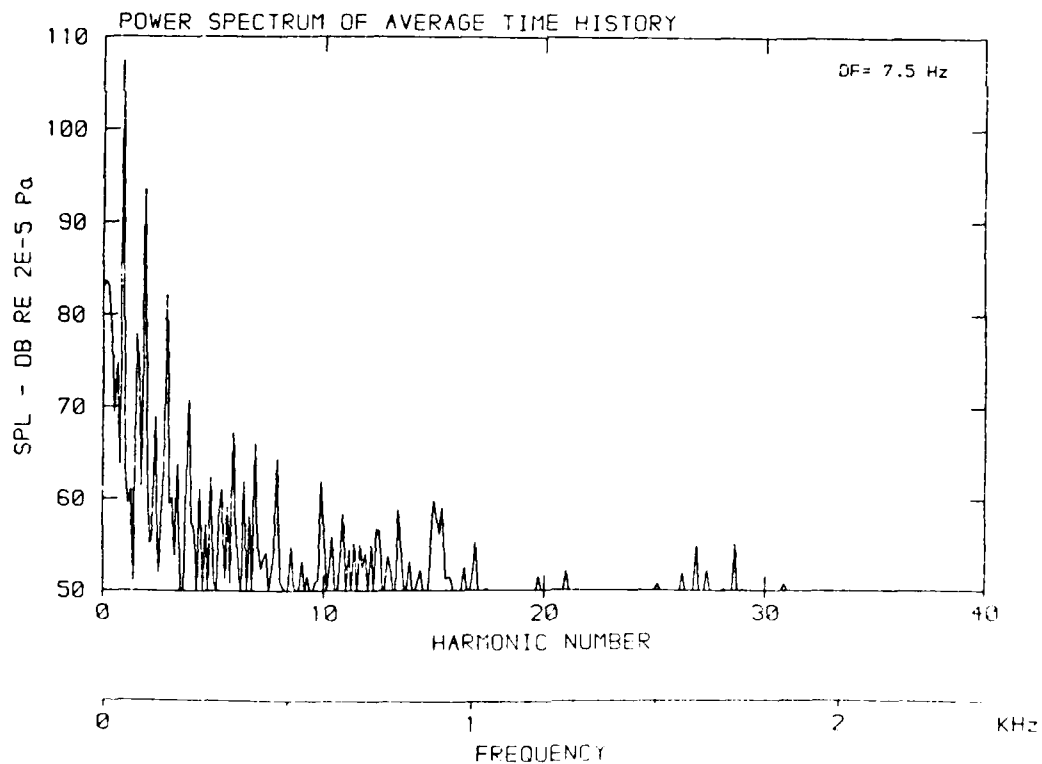
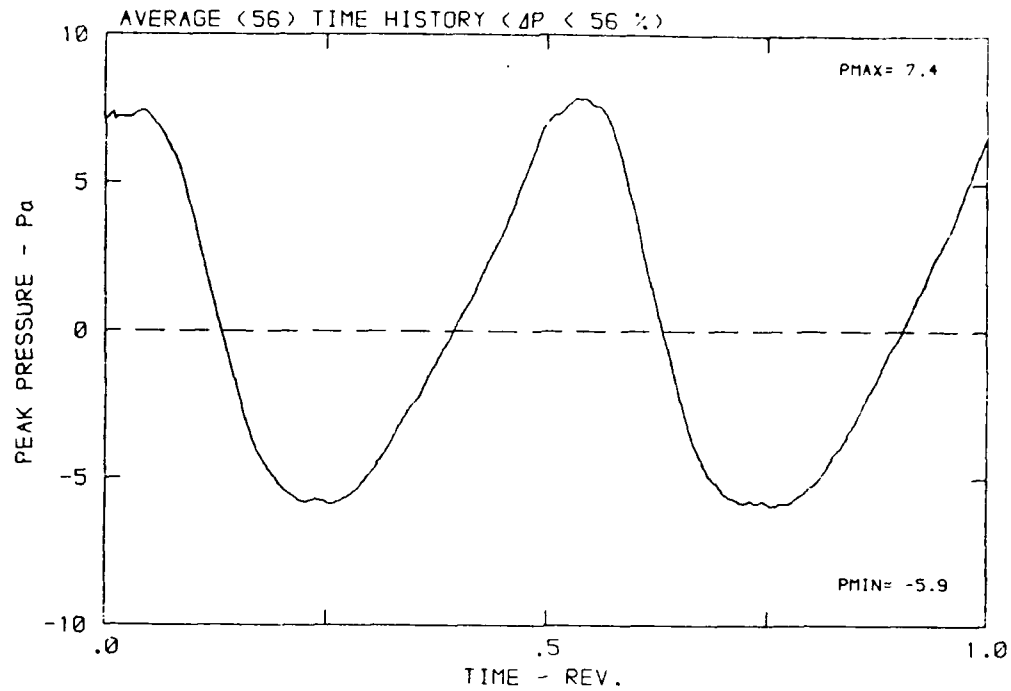
DATA POINT: EC-4 RUN: 133 MP: 7

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



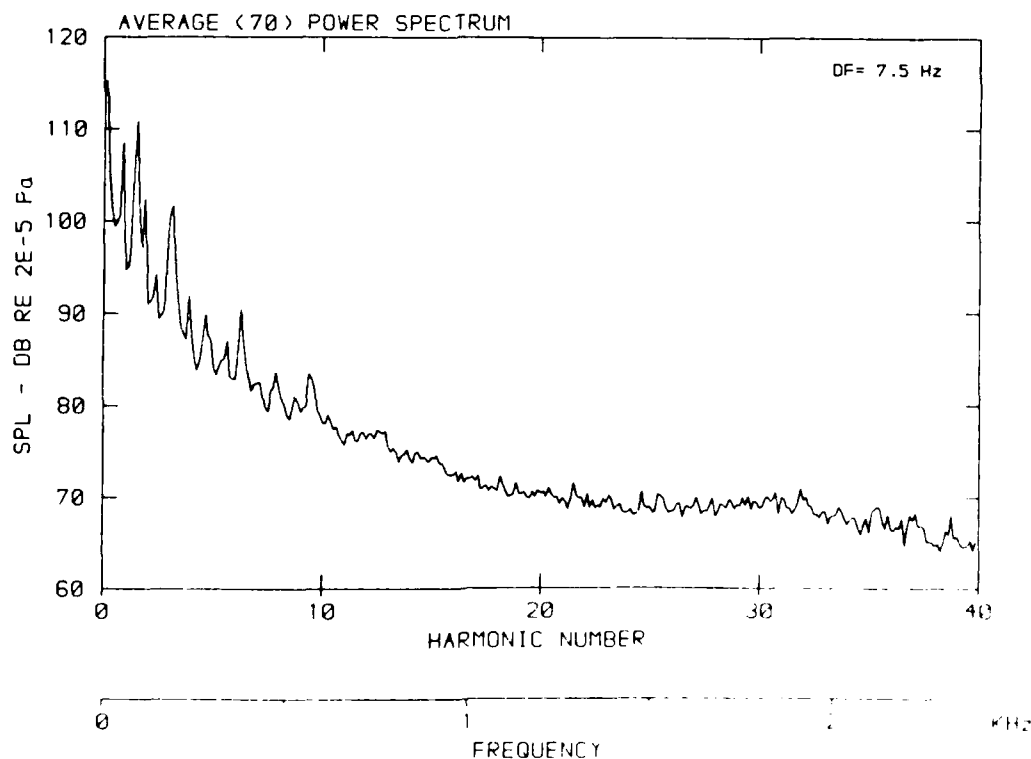
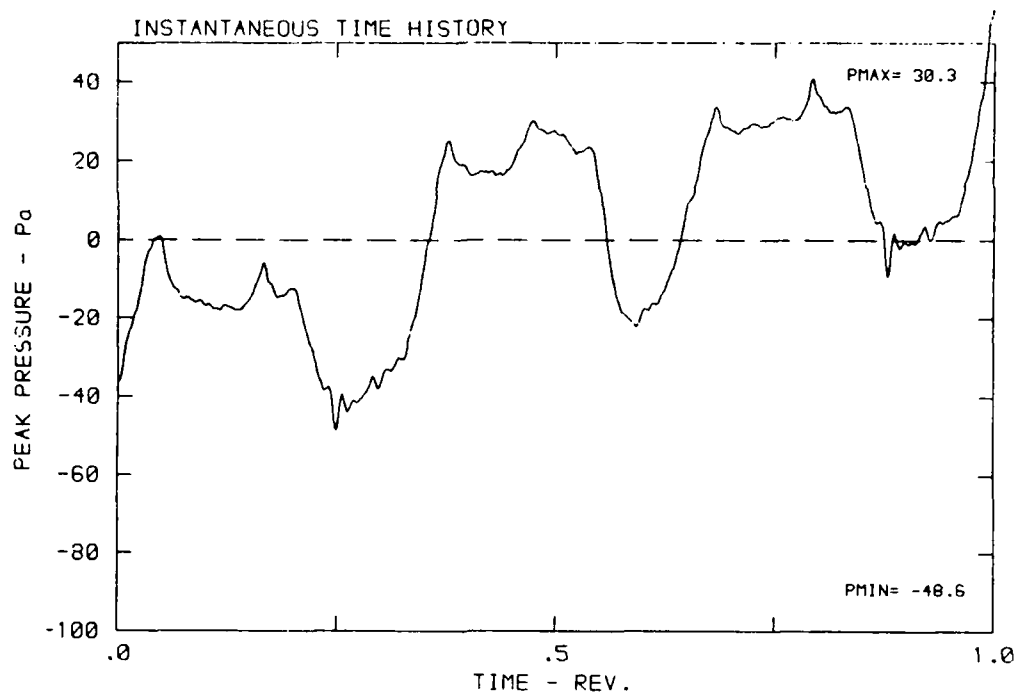
DATA POINT: EC-4 RUN: 133 MP: 7

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



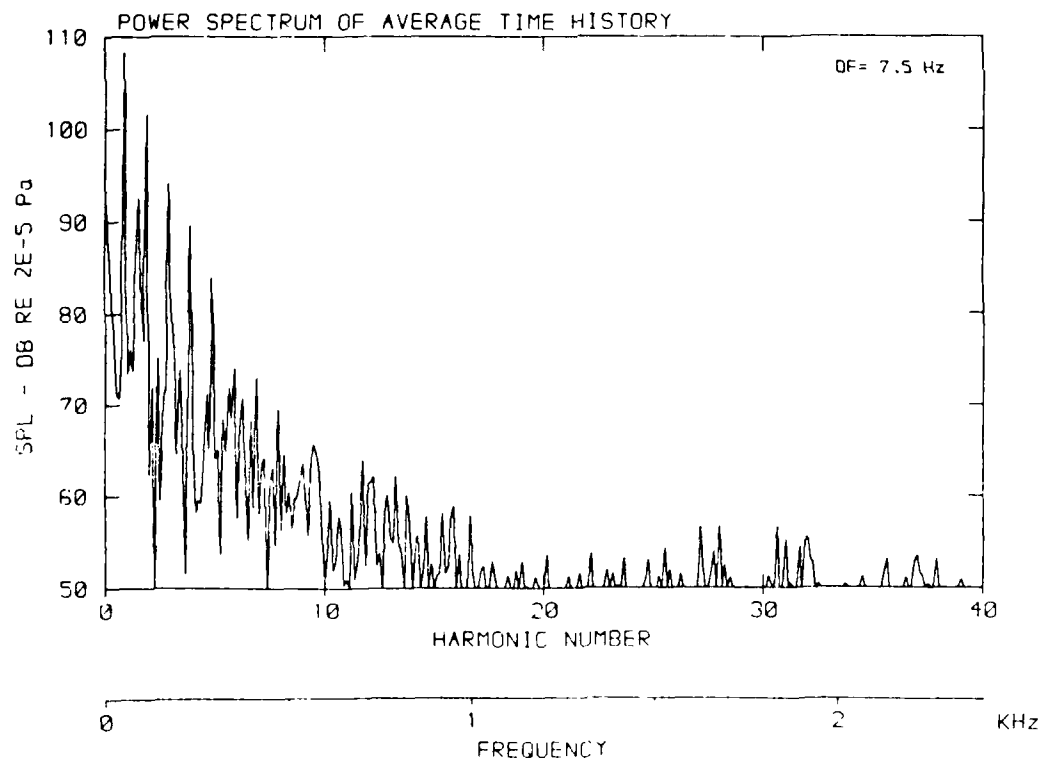
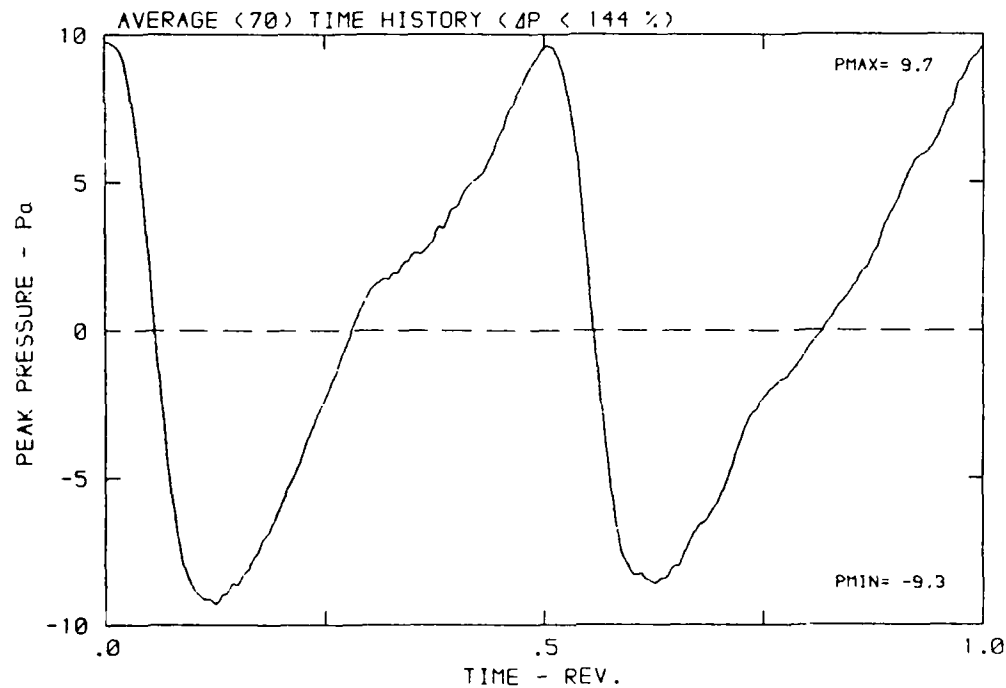
DATA POINT: EC-4 RUN: 133 MP: 8

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



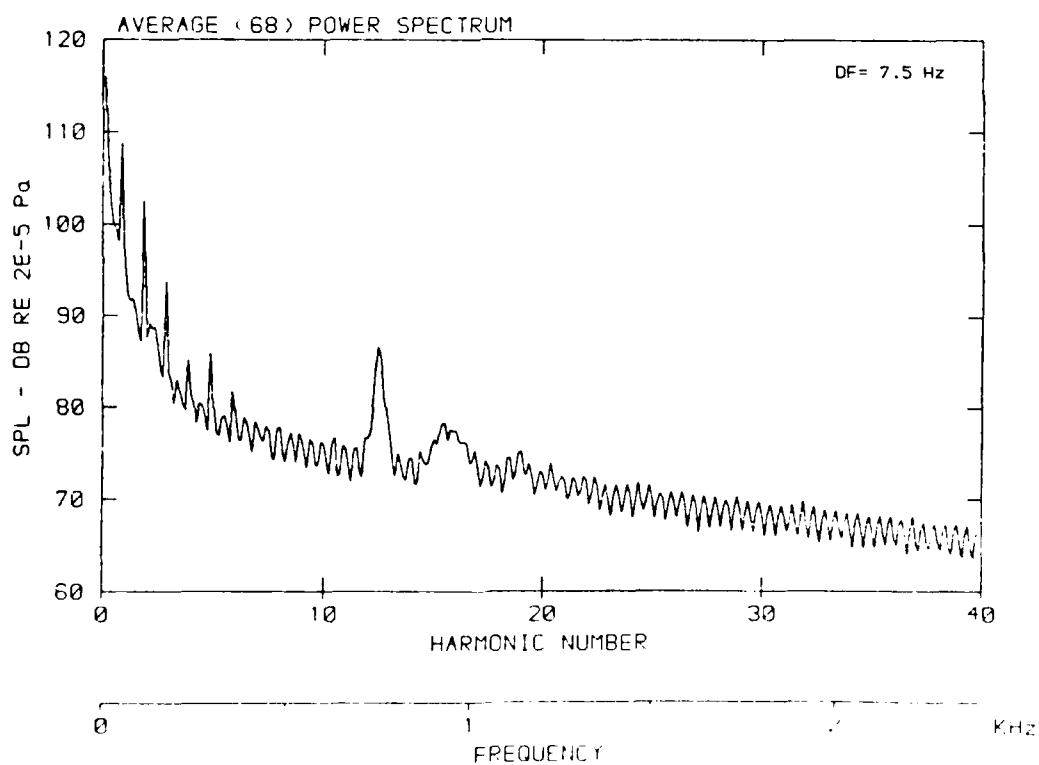
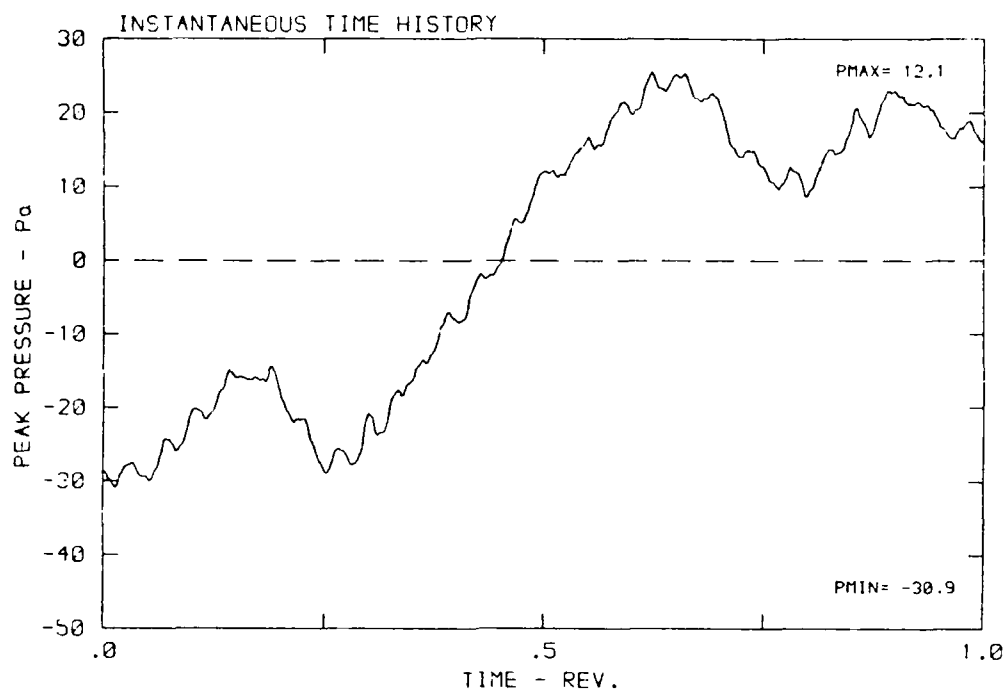
DATA POINT: EC-4 RUN: 133 MP: 8

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



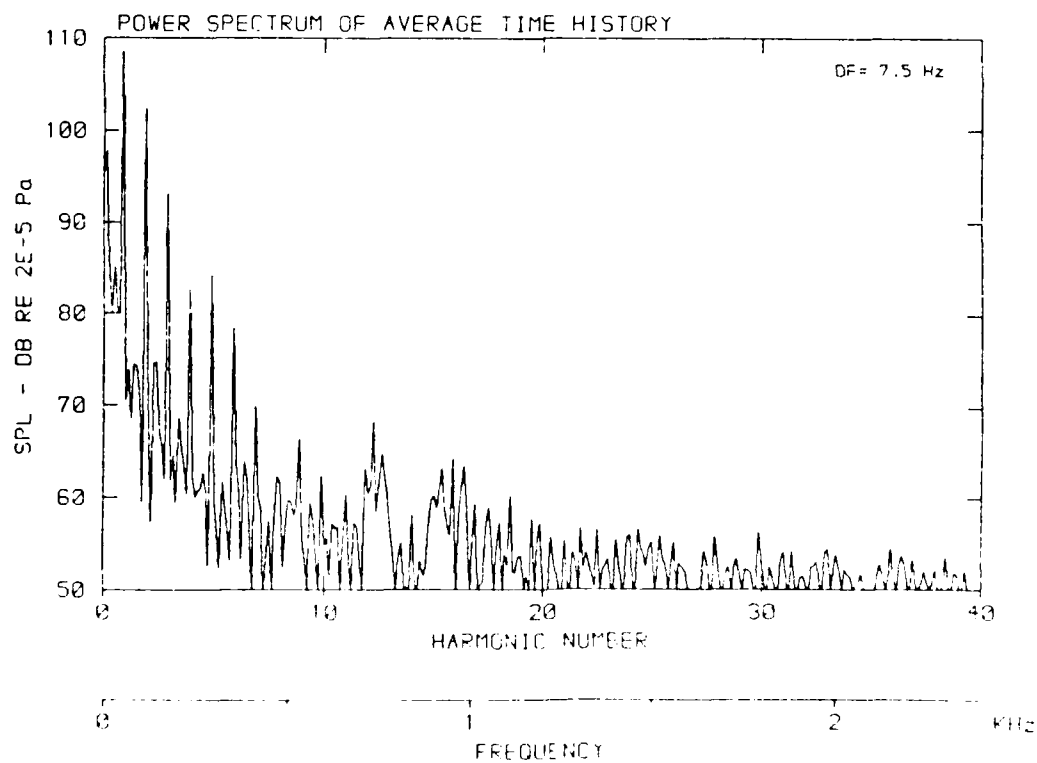
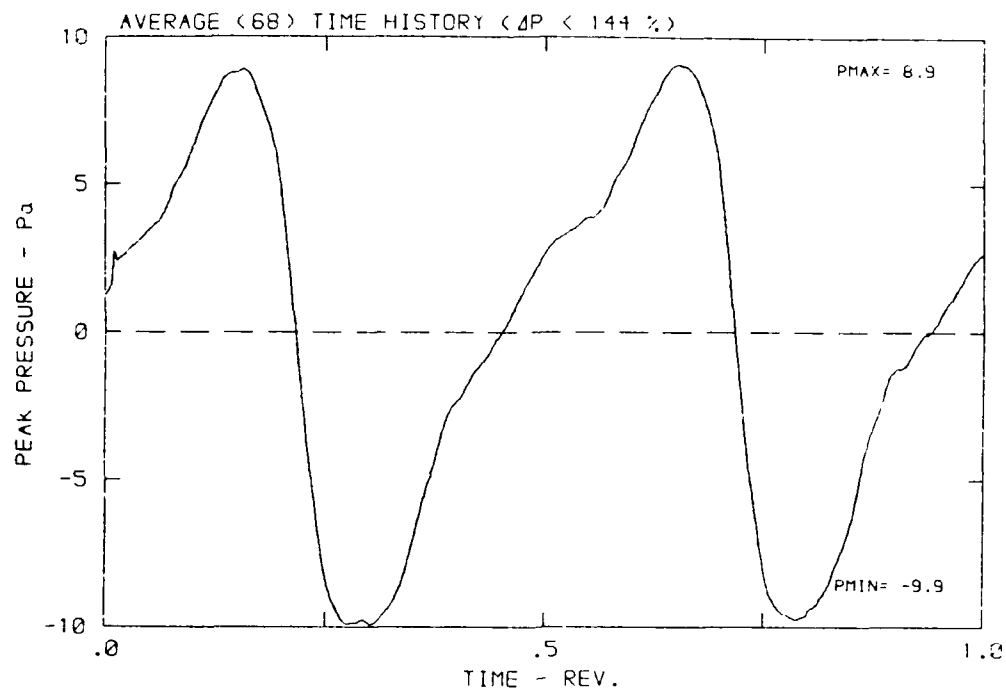
DATA POINT: EC-4 RUN: 133 MP: 9

β : 24.4° MH: .5830 n: 1800 rpm v/u : .267 ϕ : 7.3° T: 287.6 K



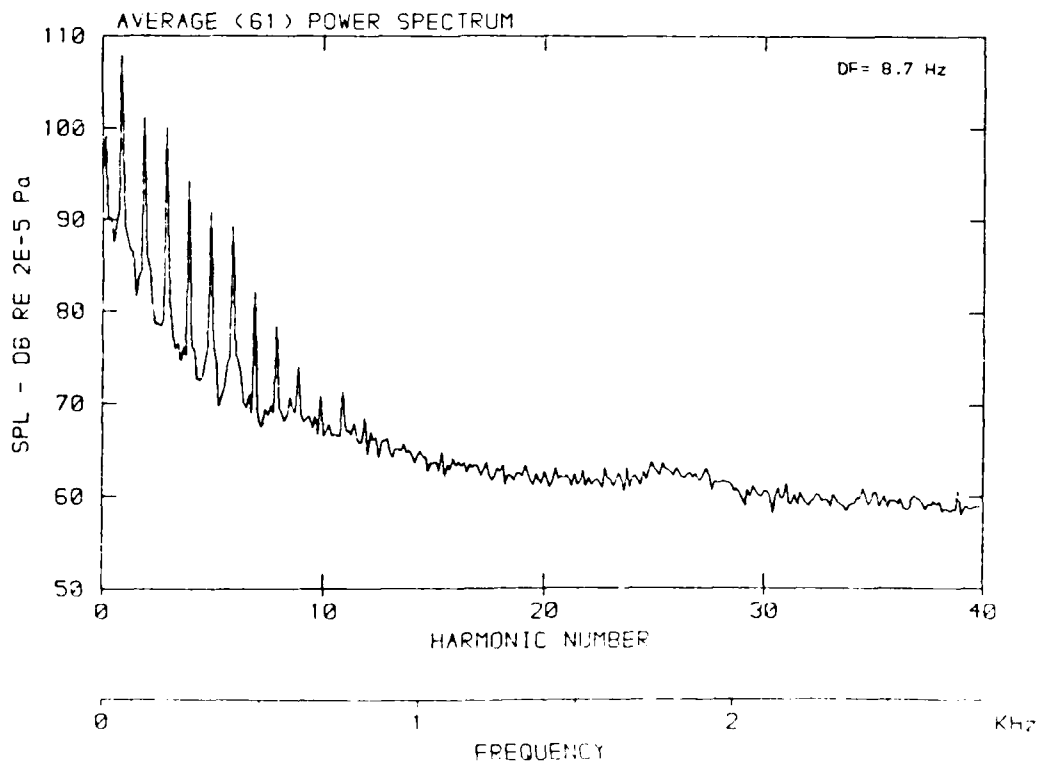
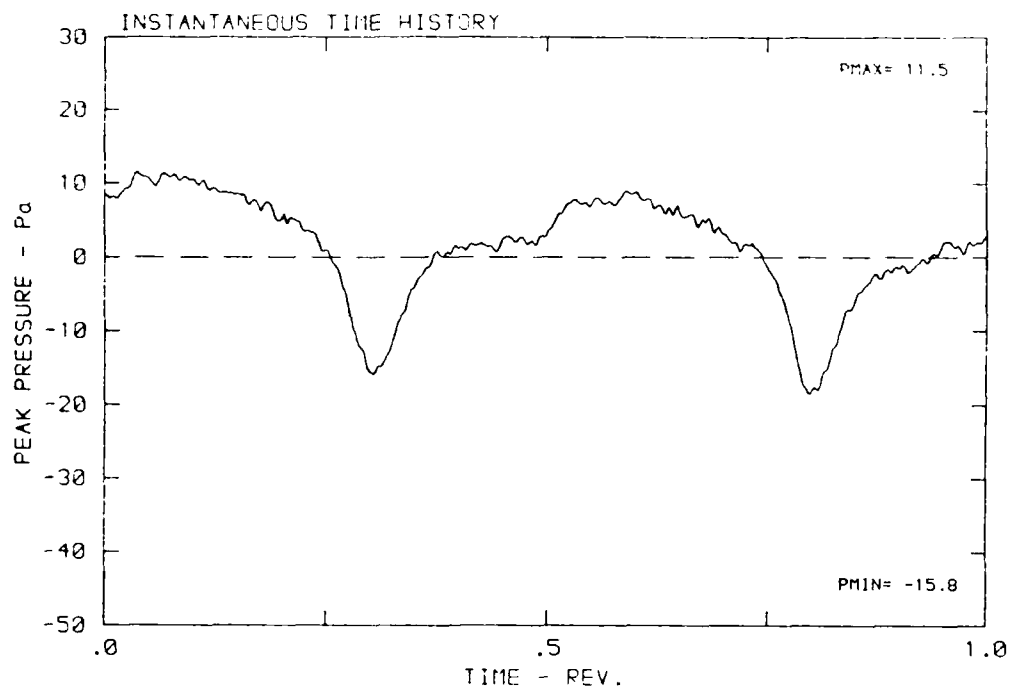
DATA POINT: EC-4 RUN: 133 MP: 9

β : 24.4° MH: .5830 n: 1800 rpm v/u: .267 ϕ : 7.3° T: 287.6 K



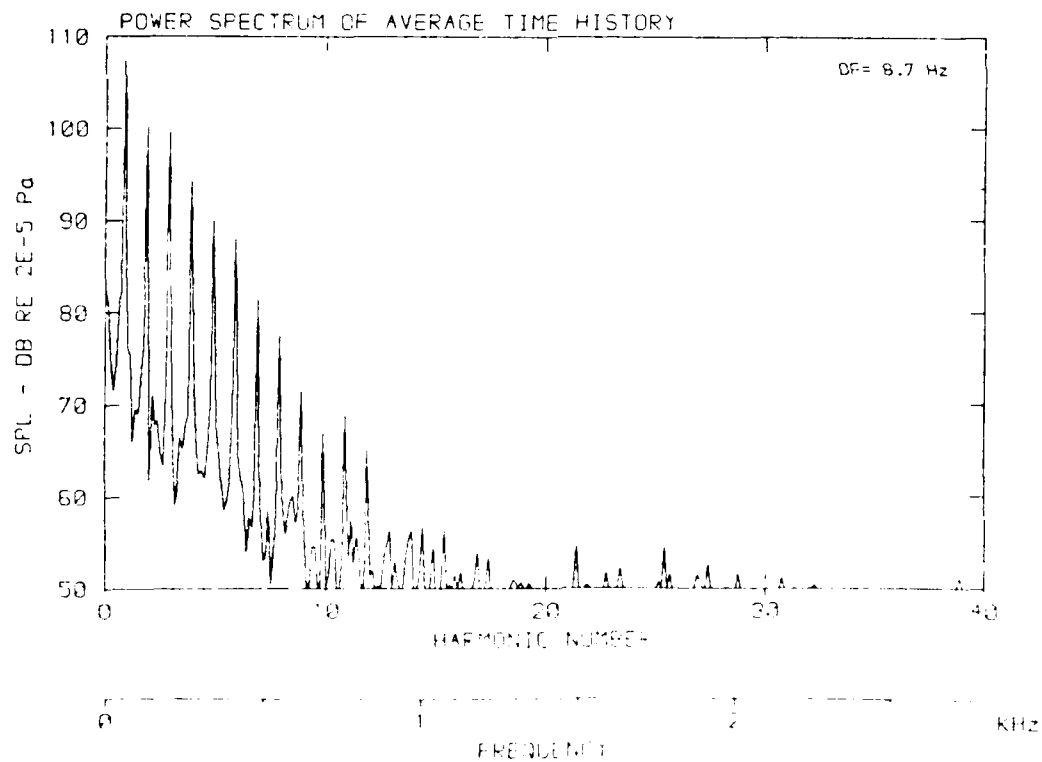
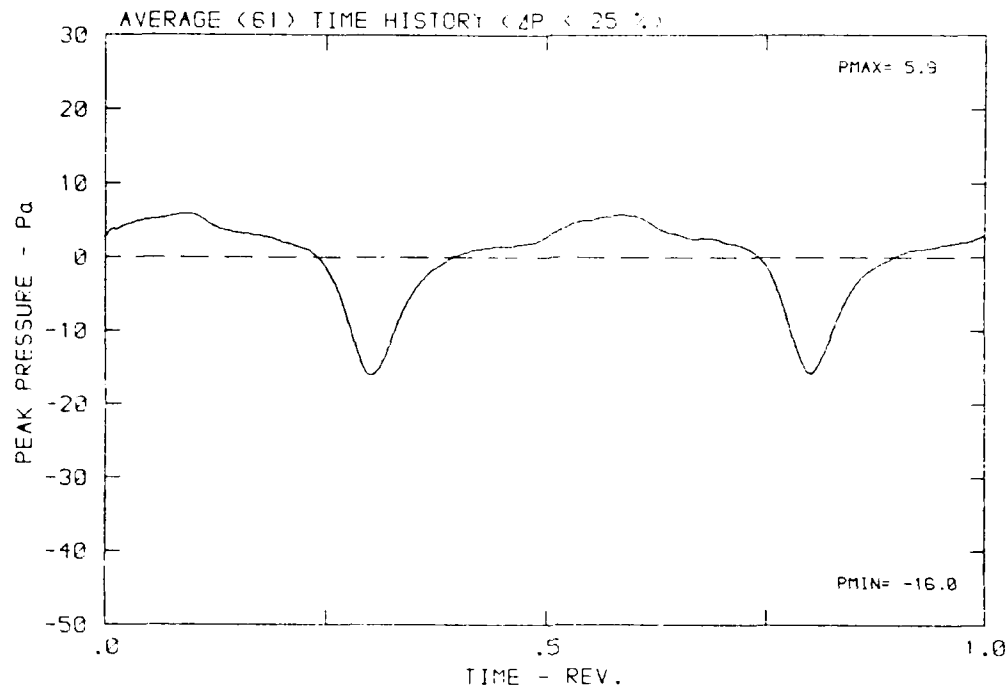
DATA POINT: EC-5 RUN: 134 MP: 1

β : 24.4° MH: .5738 n: 2180 rpm v_{ro} : .231 ϕ : 7.3° I: 288.2 W



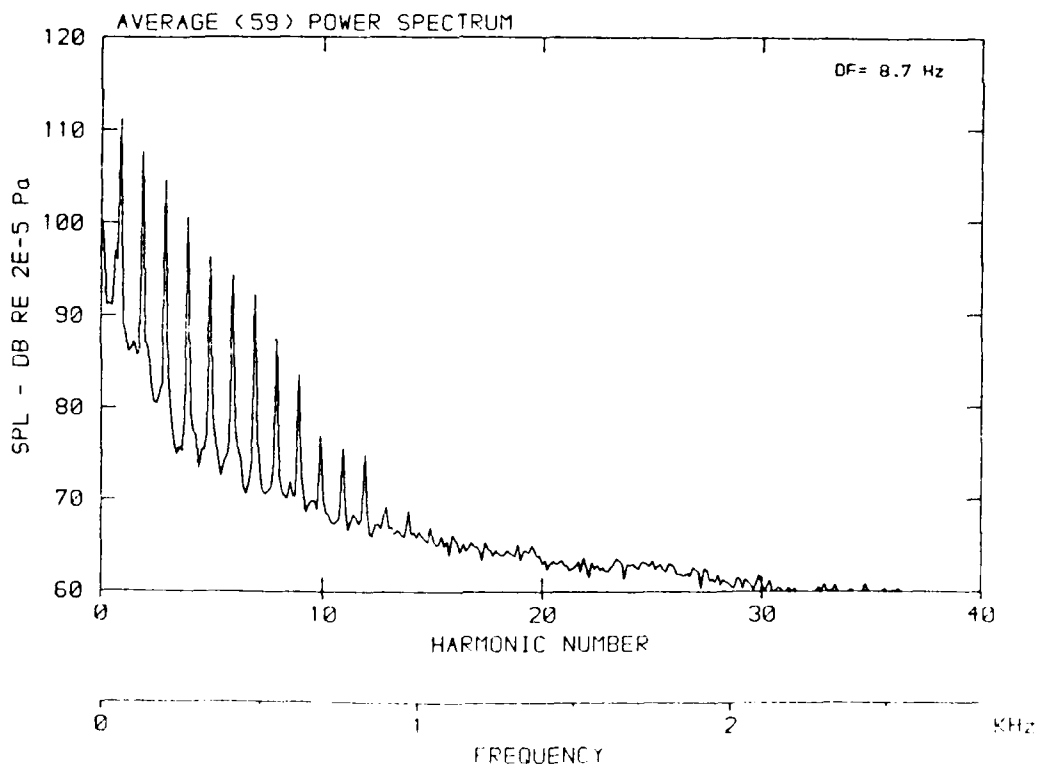
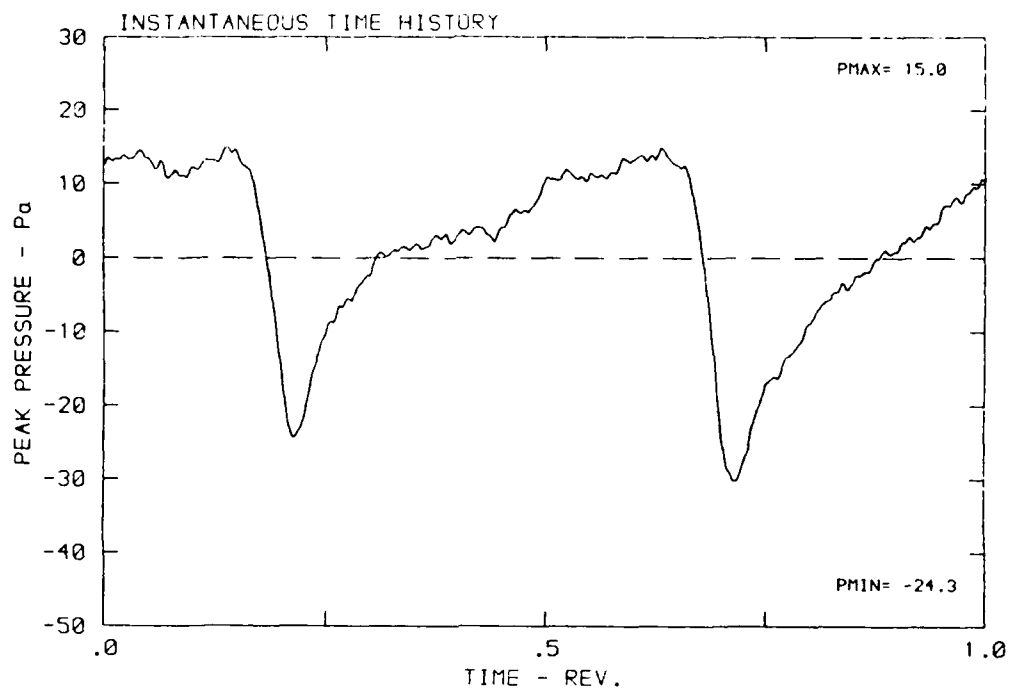
DATA POINT: EC-5 RUN: 134 MP: 1

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



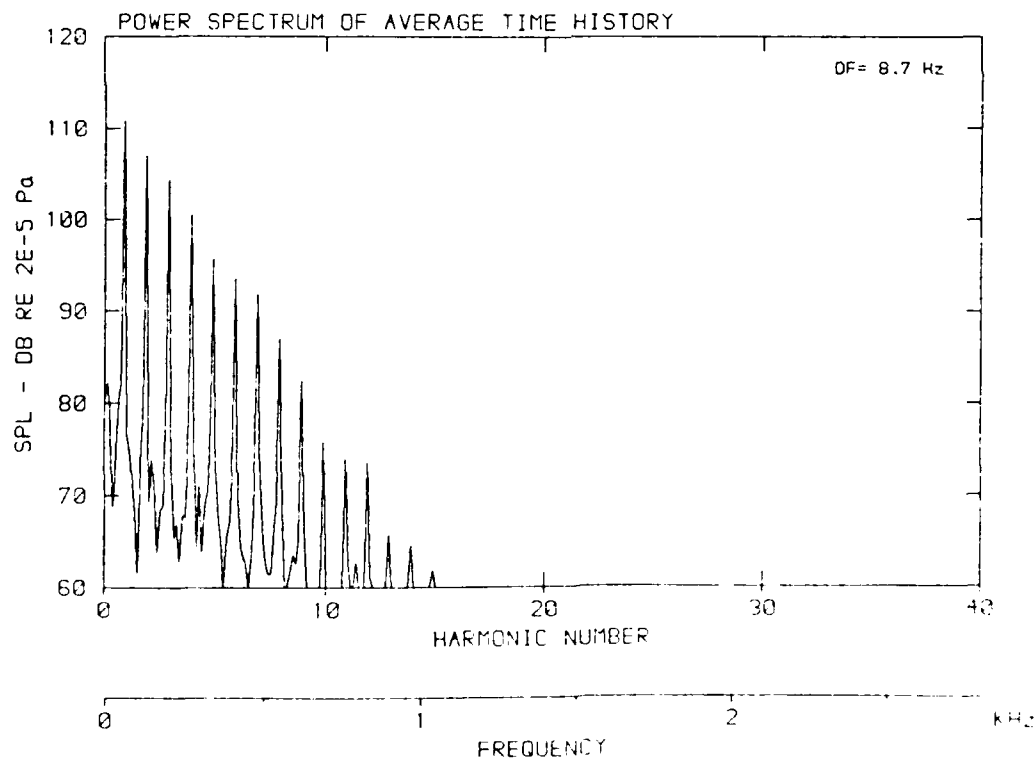
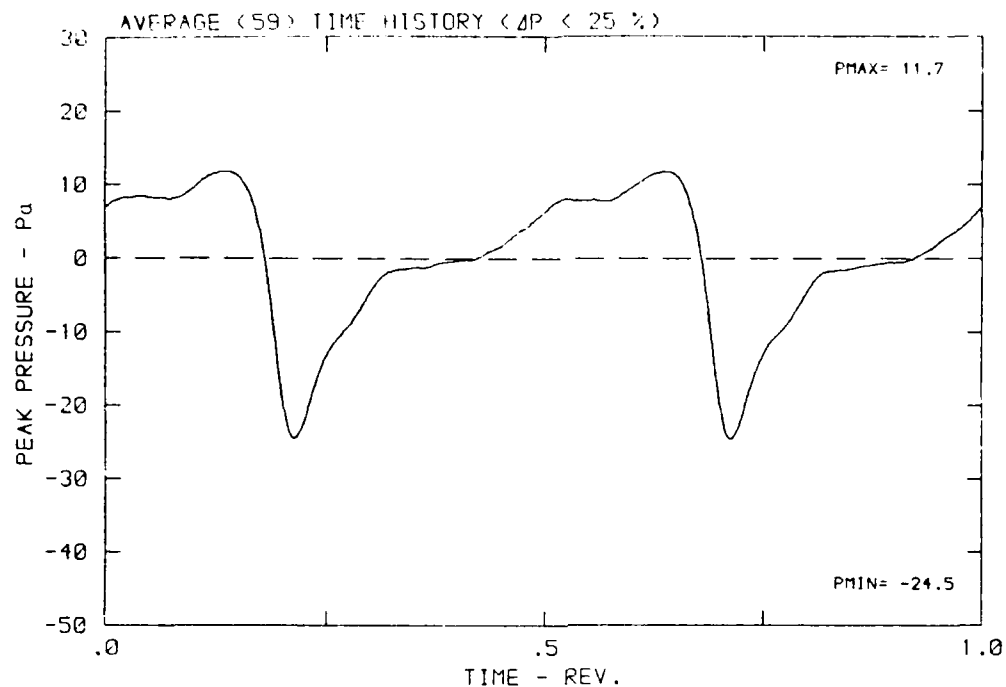
DATA POINT: EC-5 RUN: 134 MP: 2

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



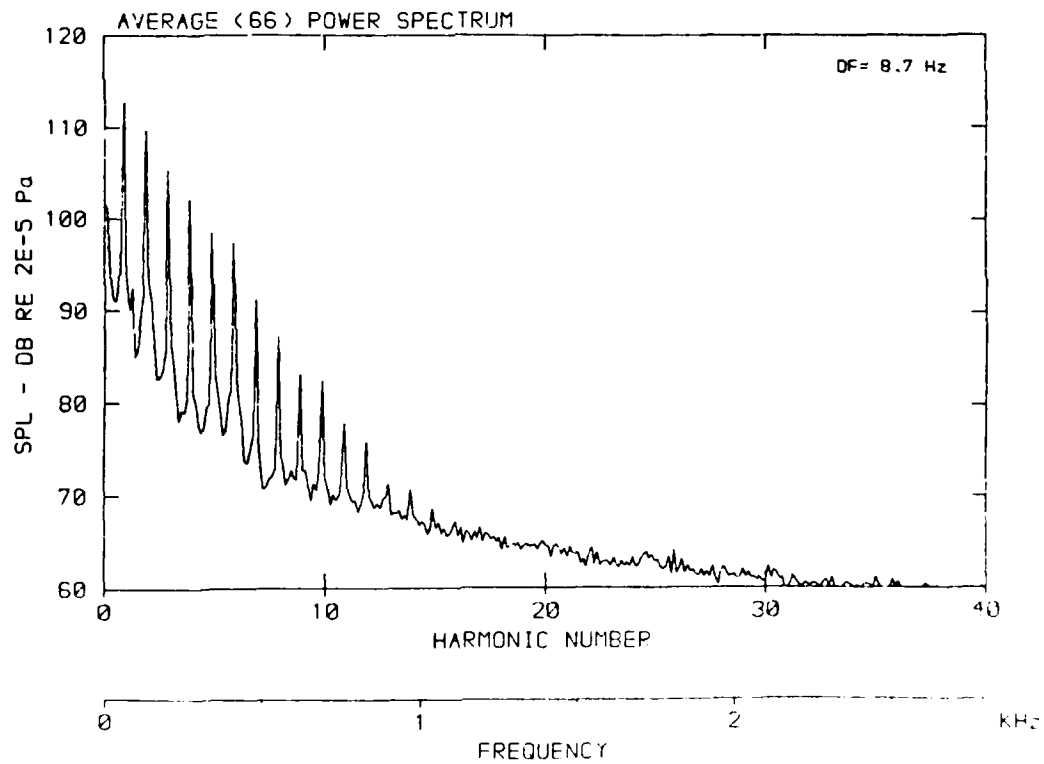
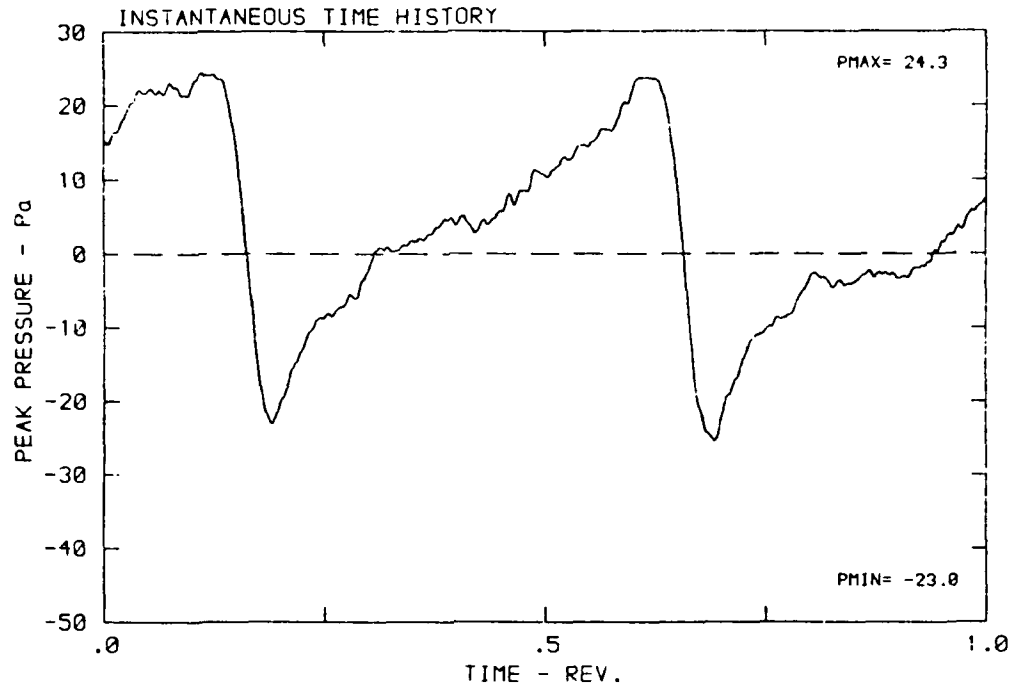
DATA POINT: EC-5 RUN: 134 MP: 2

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



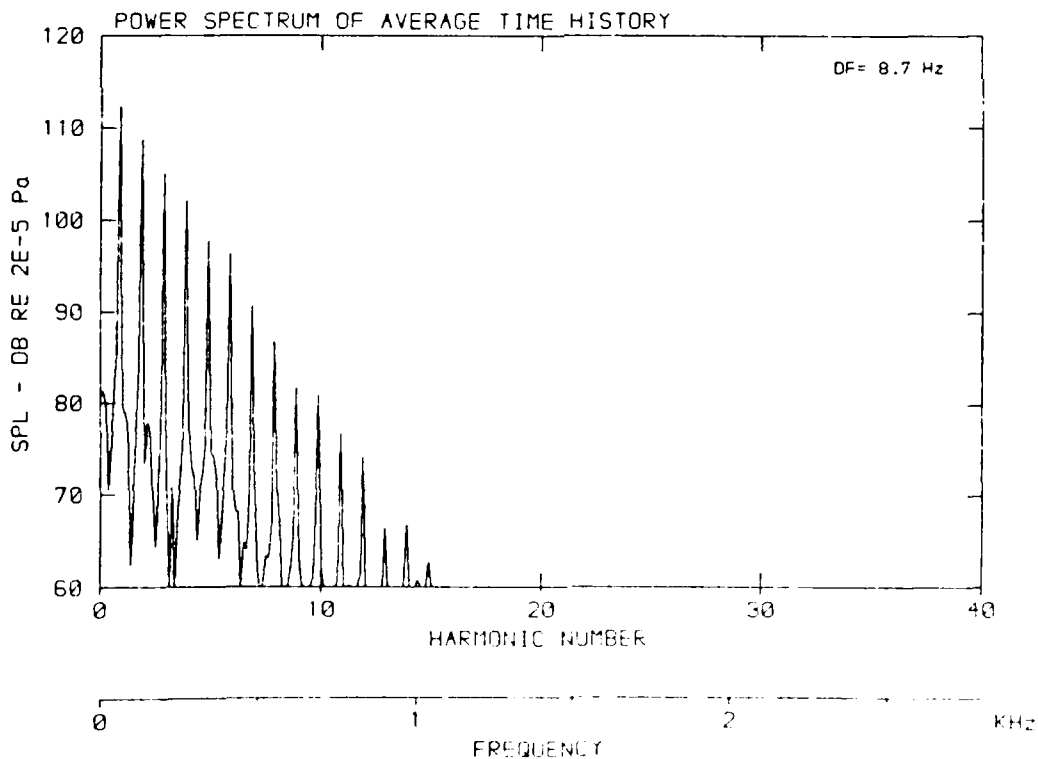
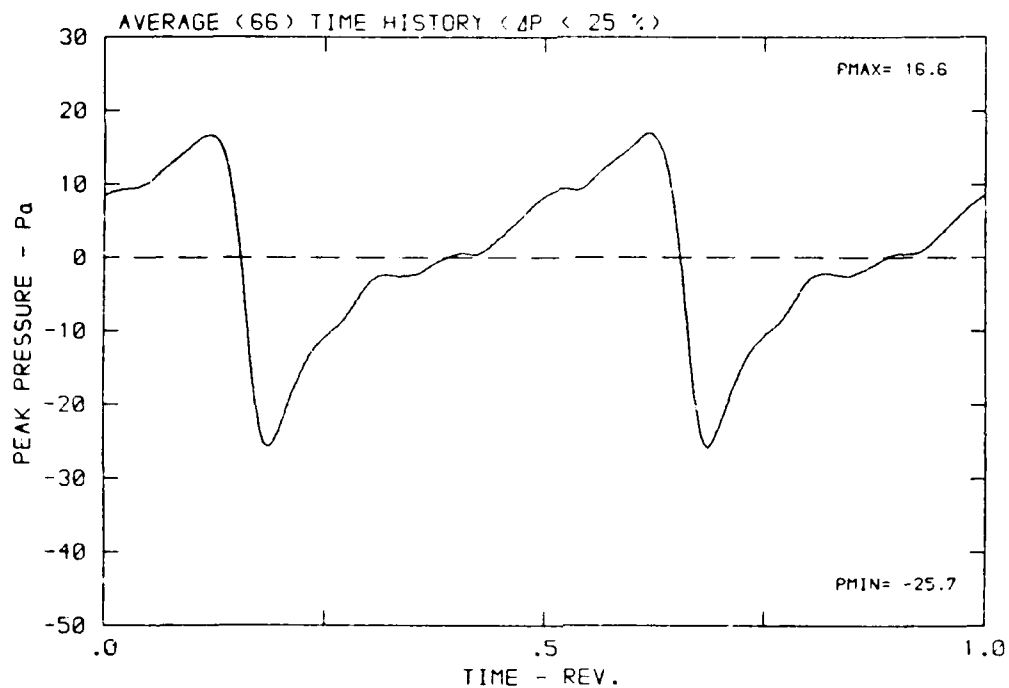
DATA POINT: EC-5 RUN: 134 MP: 3

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 283.2 K



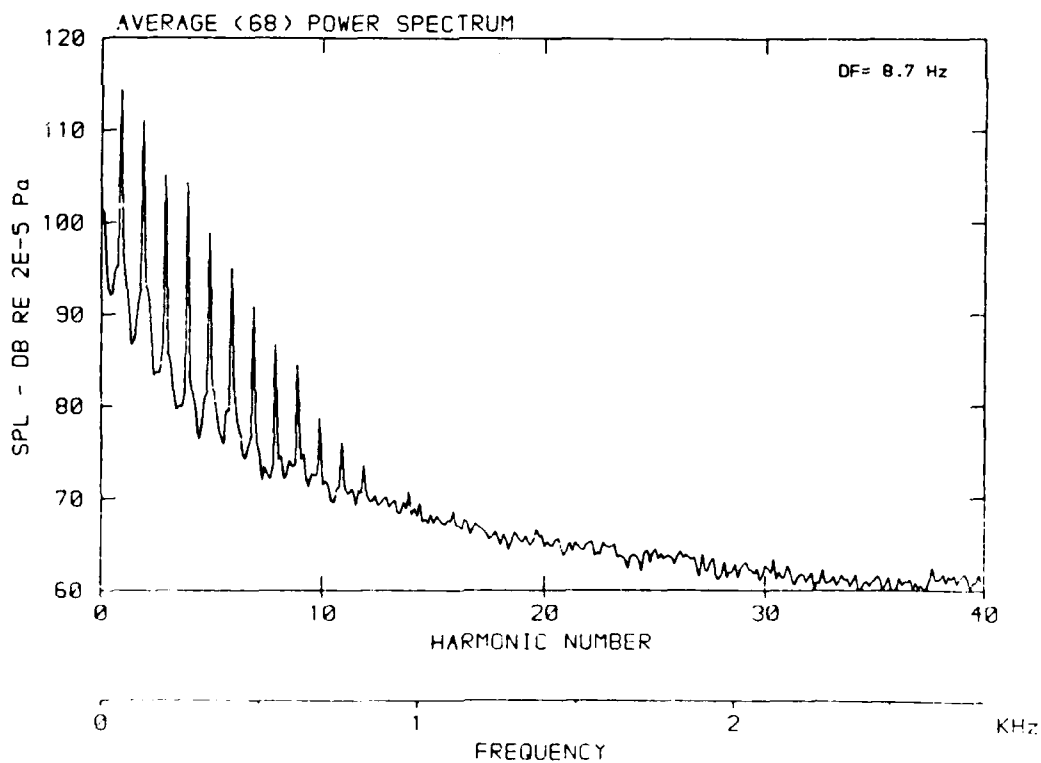
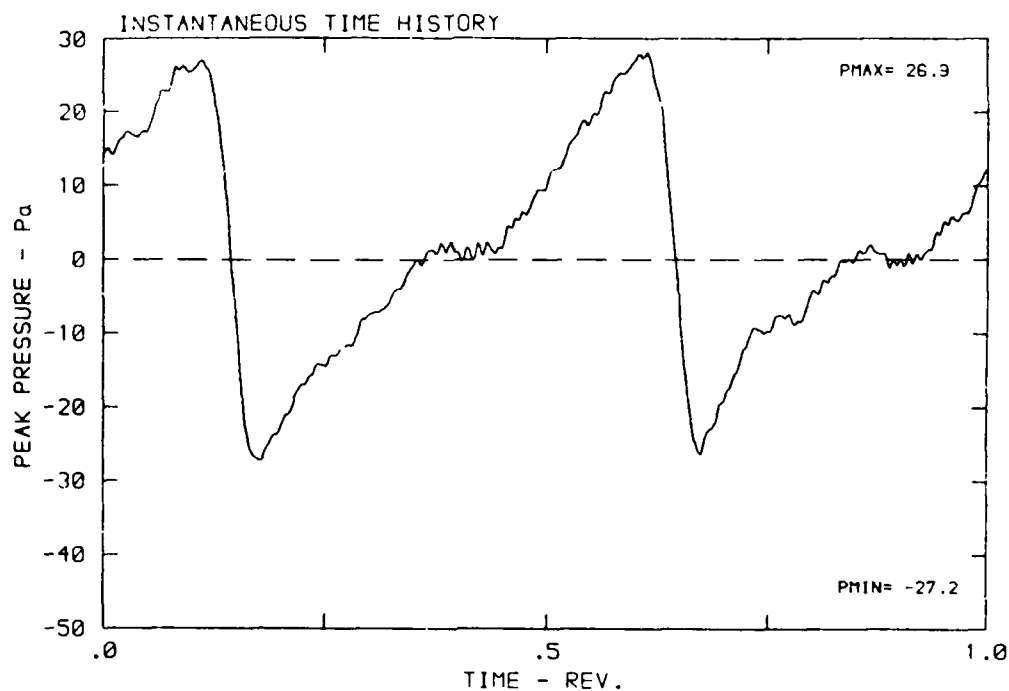
DATA POINT: EC-5 RUN: 134 MP: 3

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



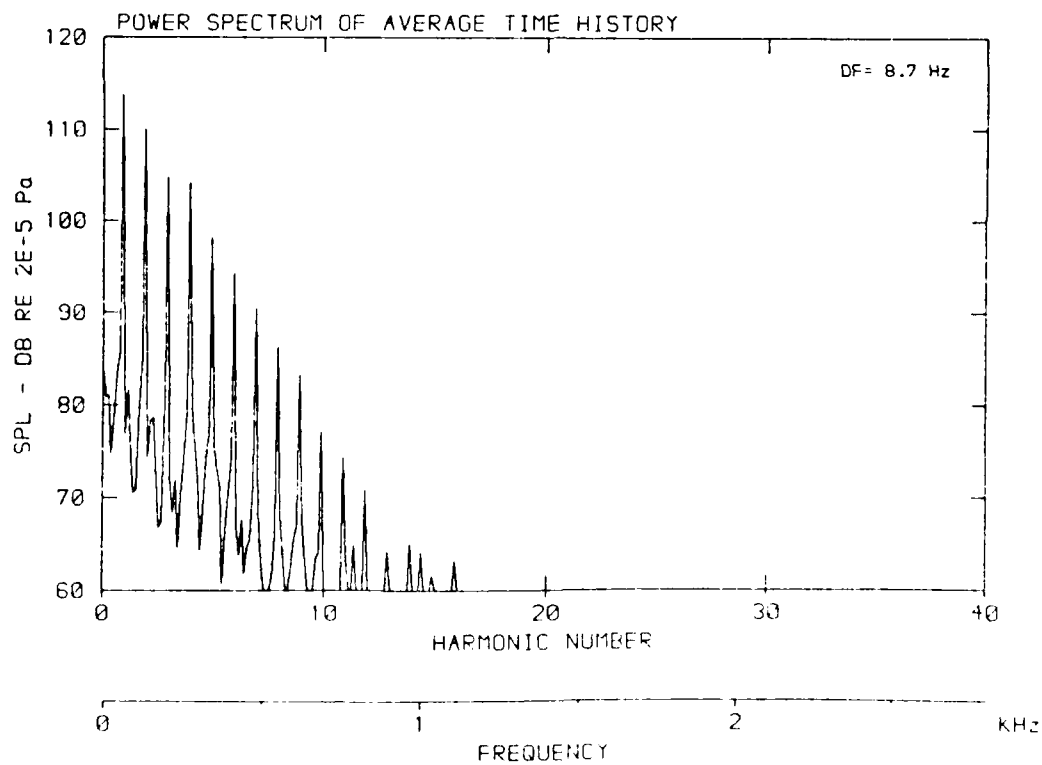
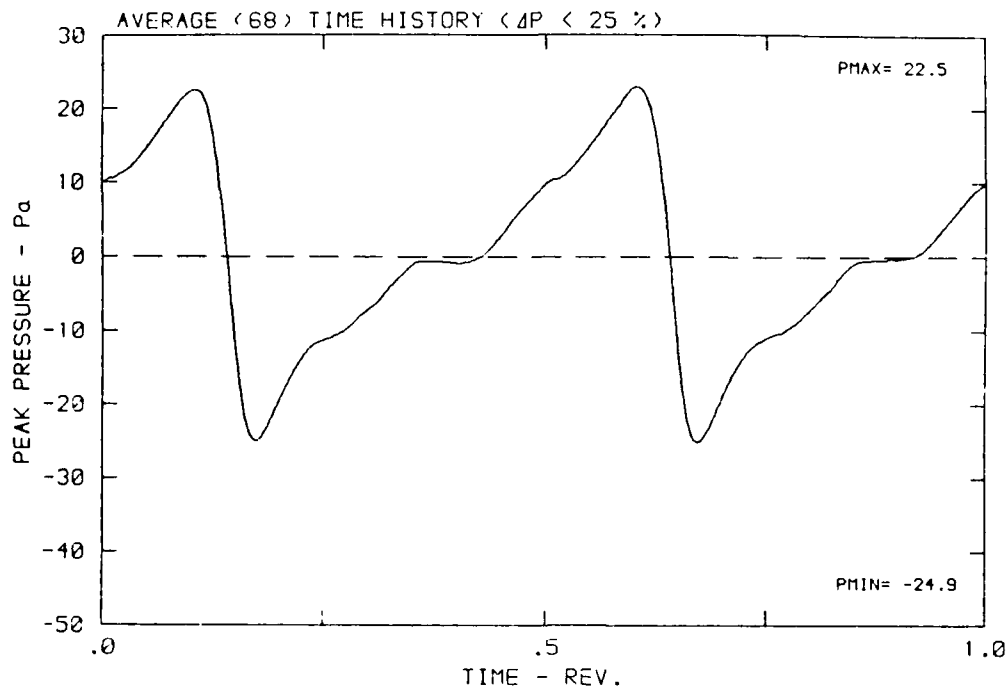
DATA POINT: EC-5 RUN: 134 MP: 4

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



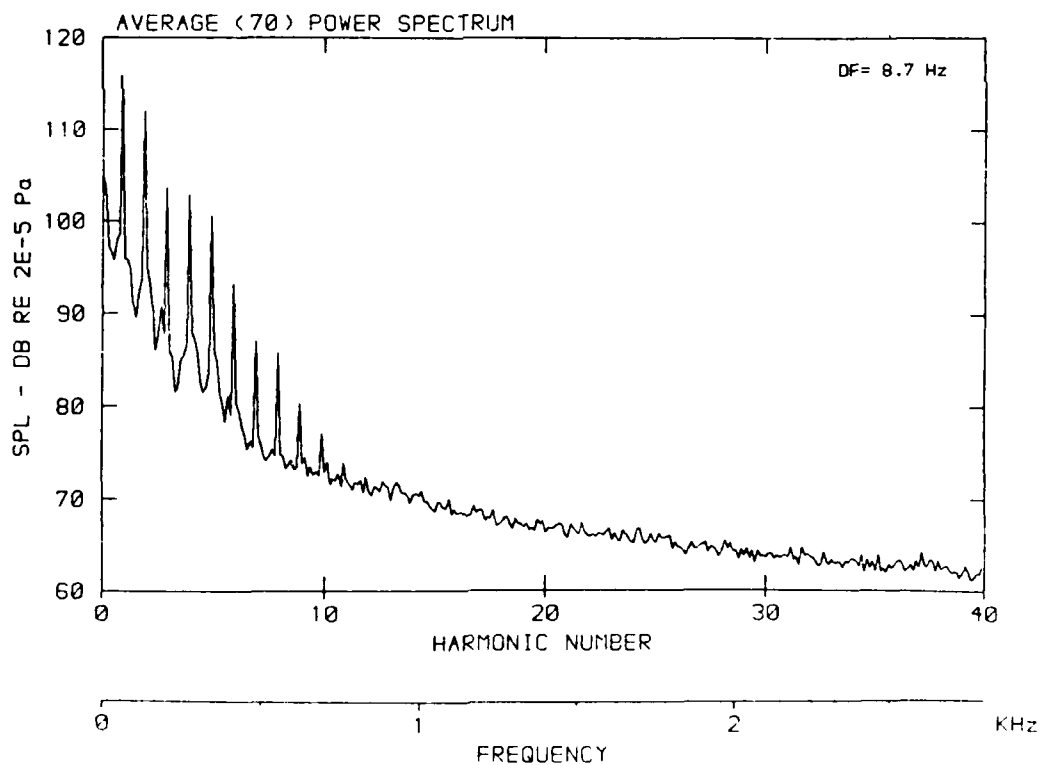
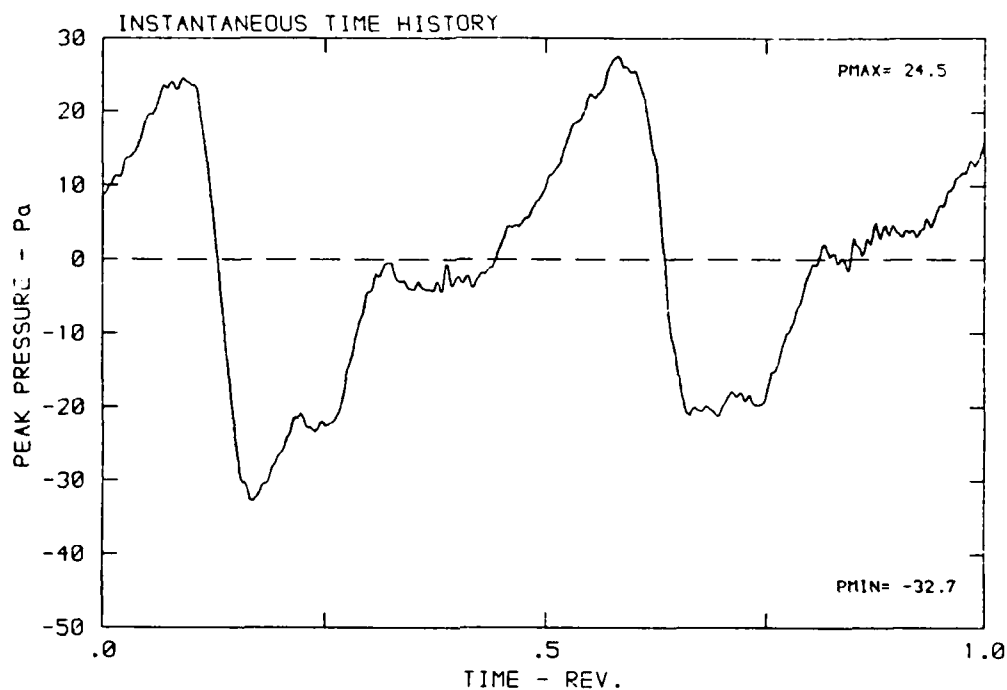
DATA POINT: EC-5 RUN: 134 MP: 4

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



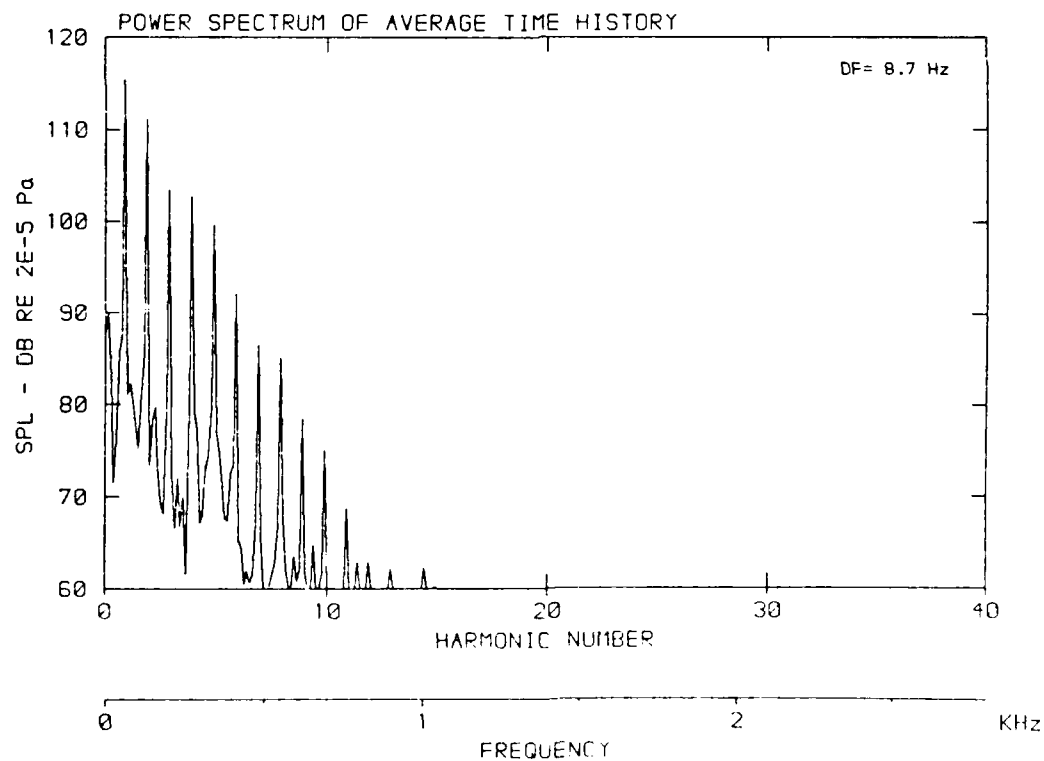
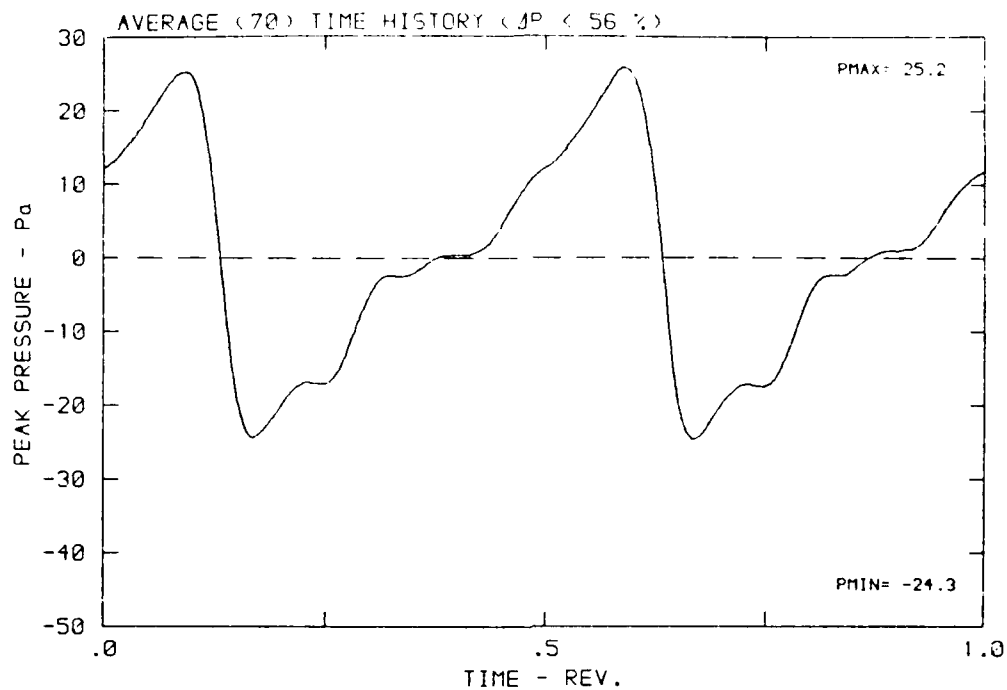
DATA POINT: EC-5 RUN: 134 MP: 5

β : 24.4° MH: .6738 n: 2160 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



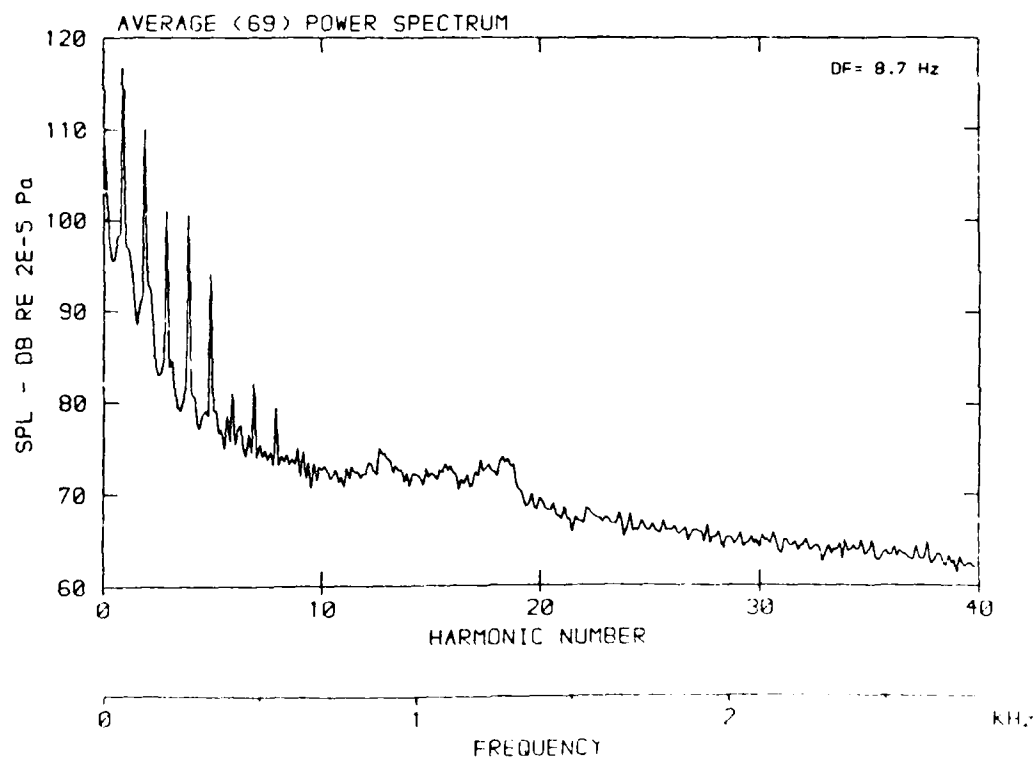
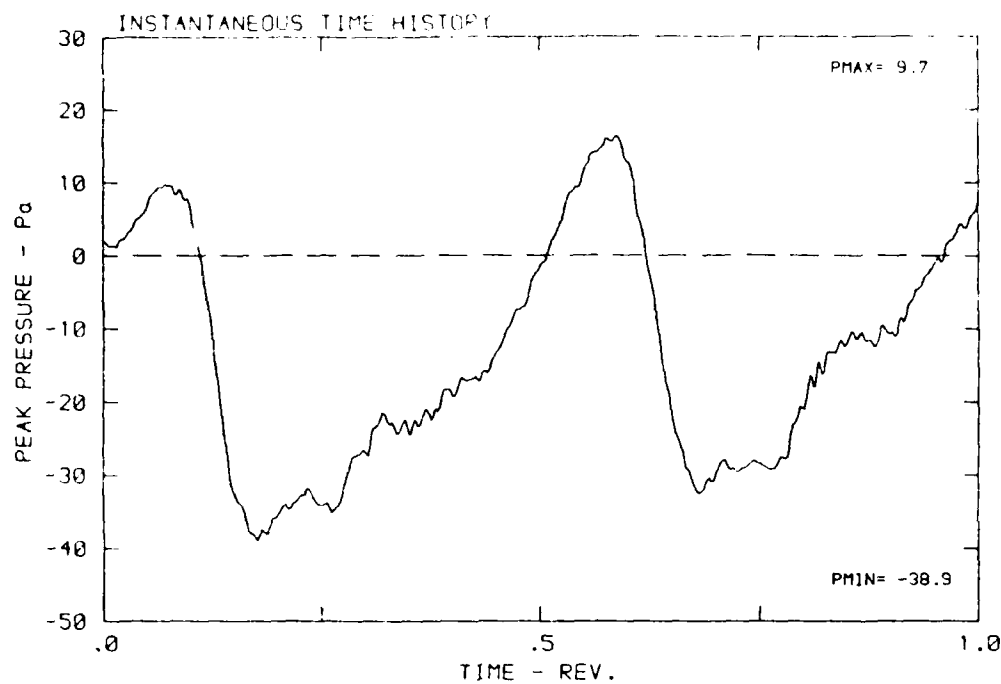
DATA POINT: EC-5 RUN: 134 MP: 5

β : 24.4 MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



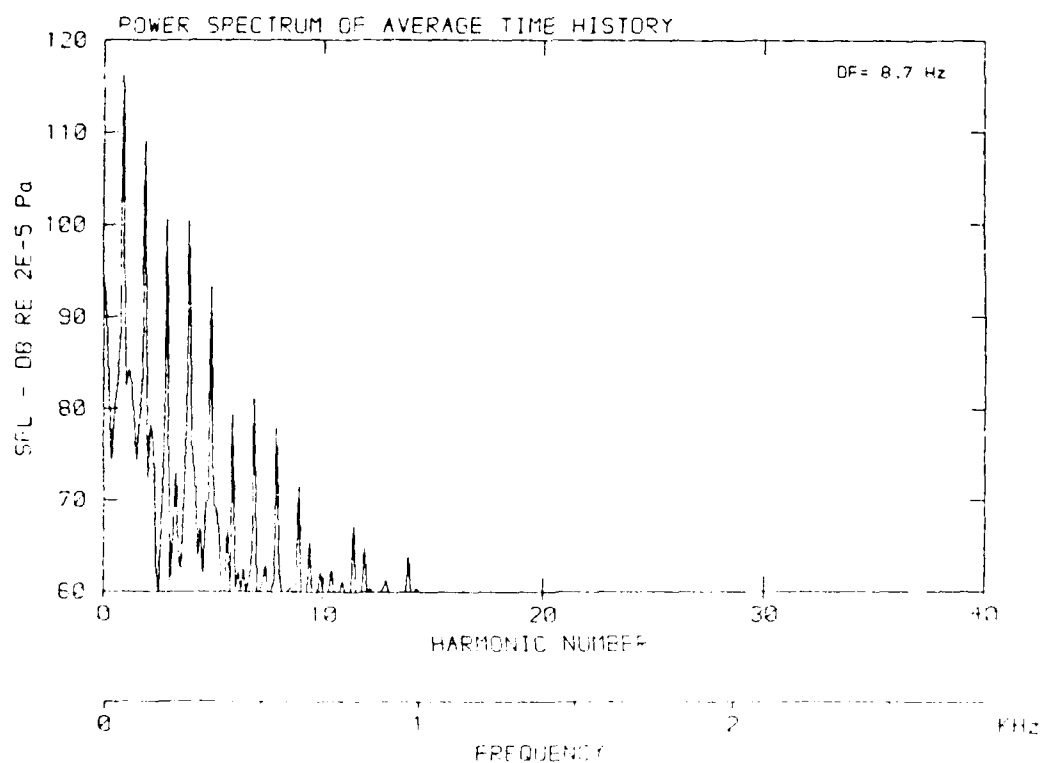
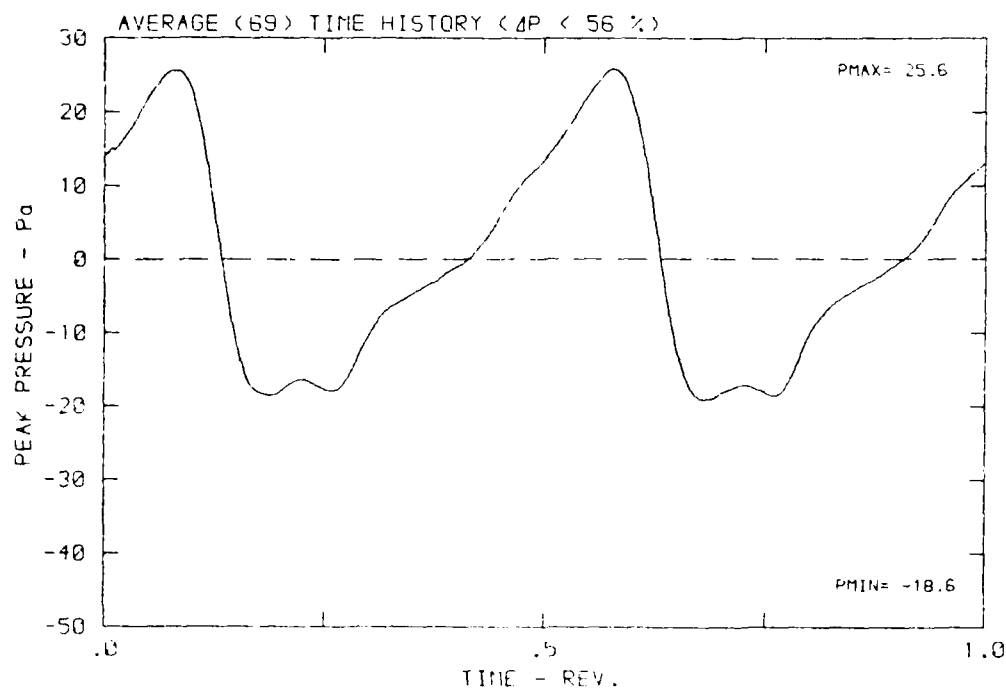
DATA POINT: EC-5 RUN: 134 MP: 6

β : 24.4° MH: .6733 n: 2100 rpm ν : .231 ϕ : 7.3° τ : 200.2 F



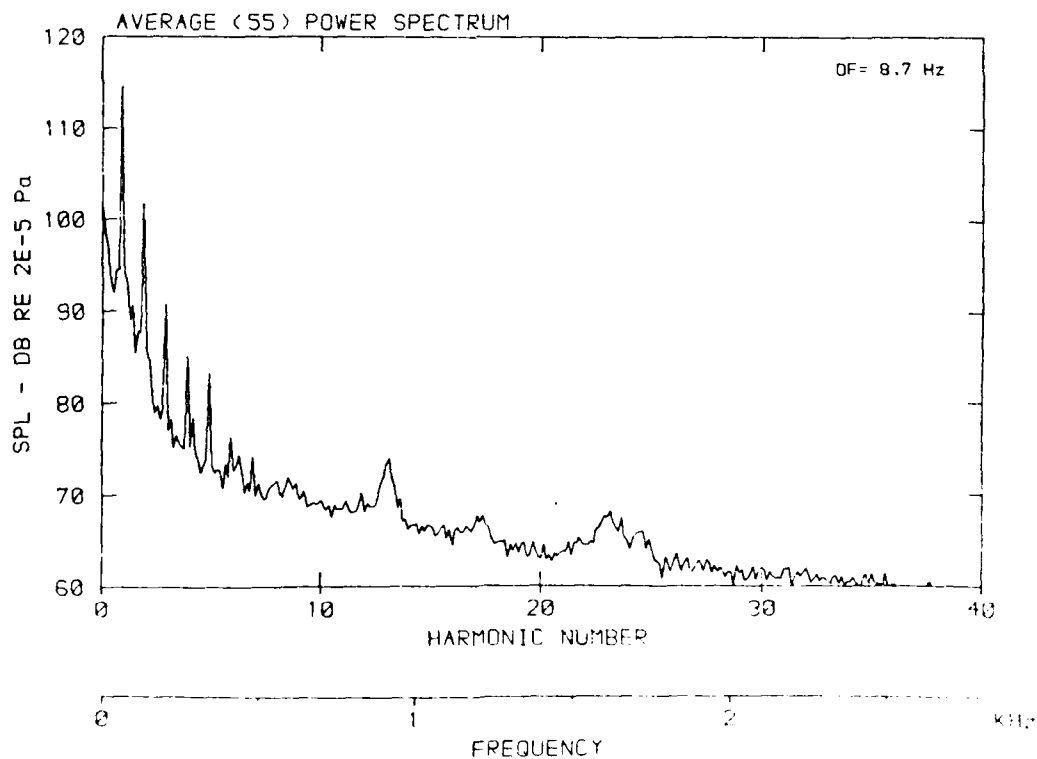
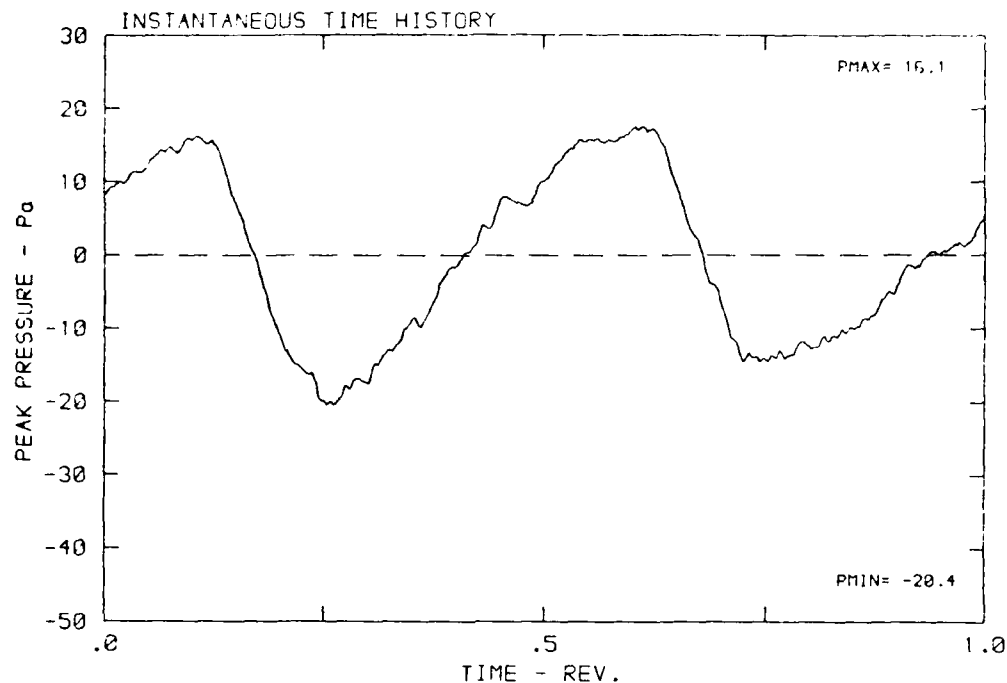
DATA POINT: EC-5 RUN: 134 MP: 6

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



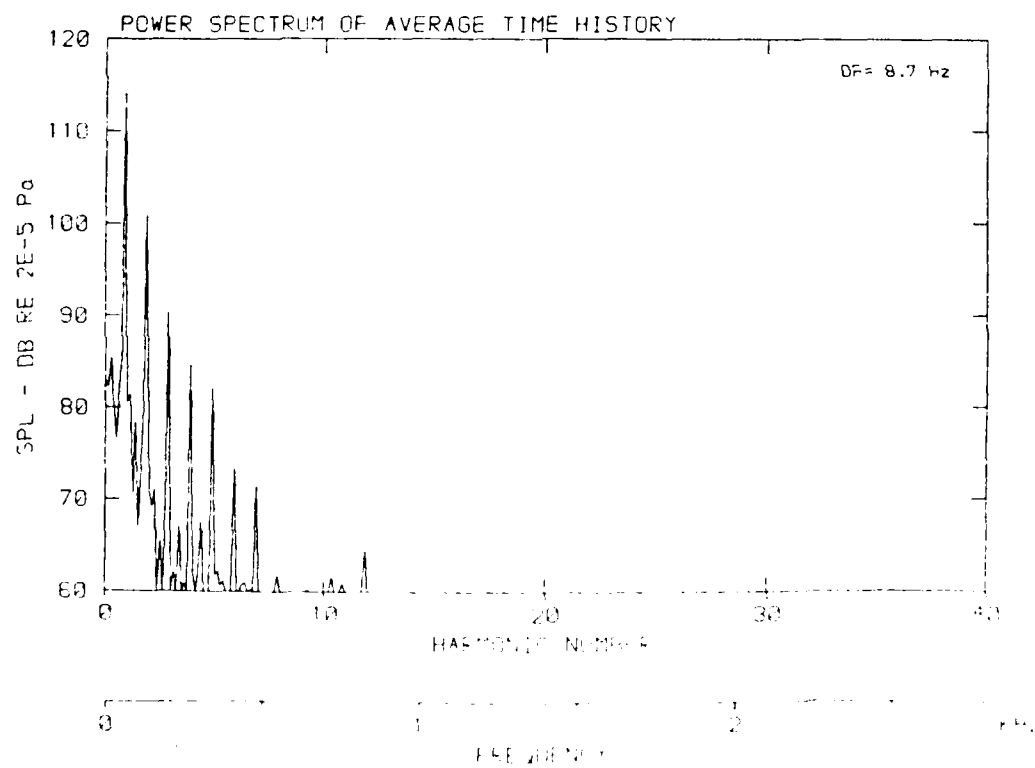
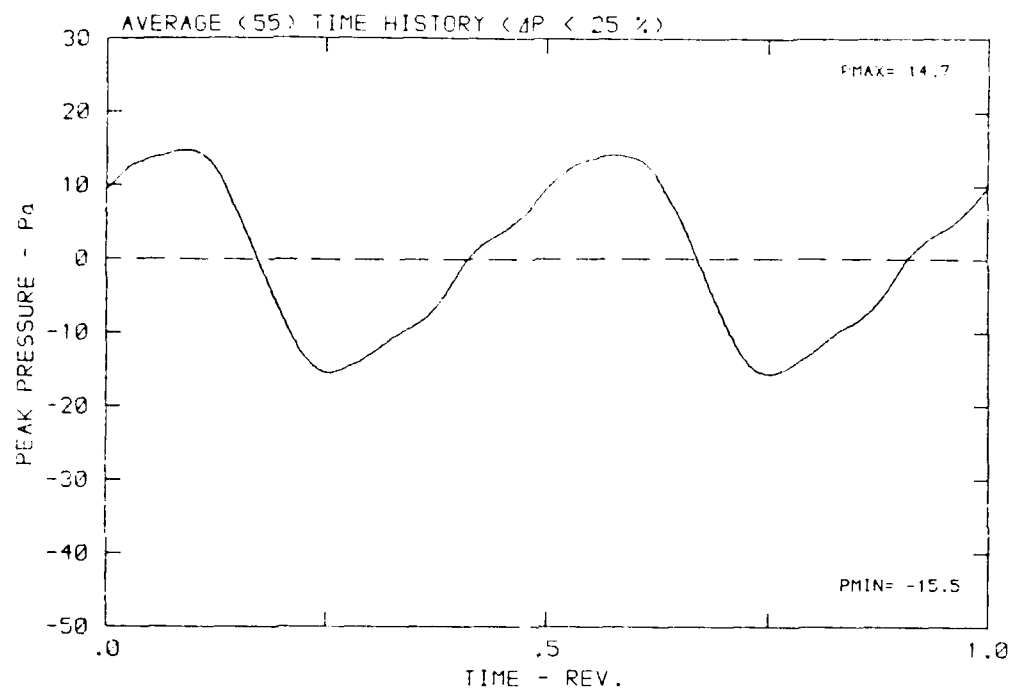
DATA POINT: EC-5 RUN: 134 MP: 7

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 268.2 °



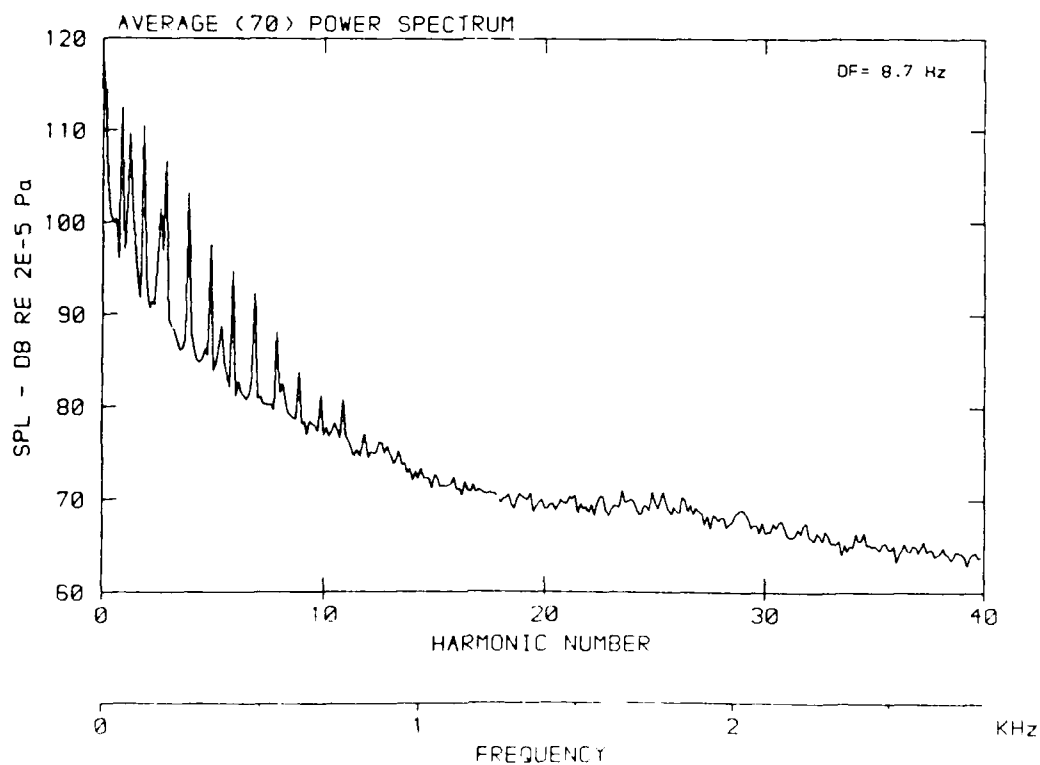
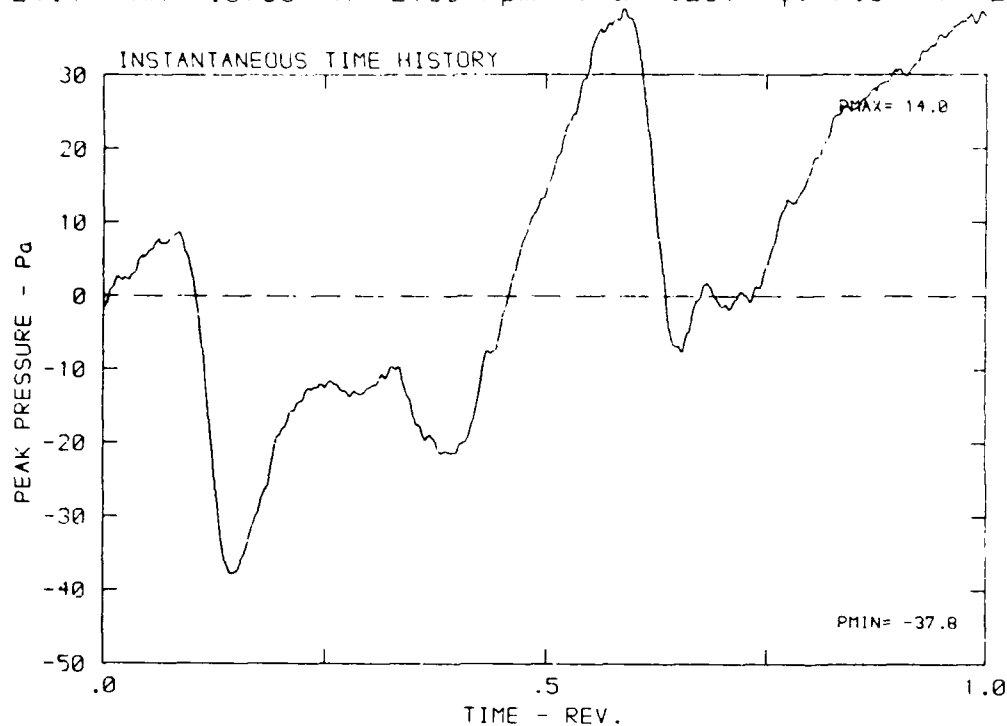
DATA POINT: EC-5 RUN: 134 MP: 7

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



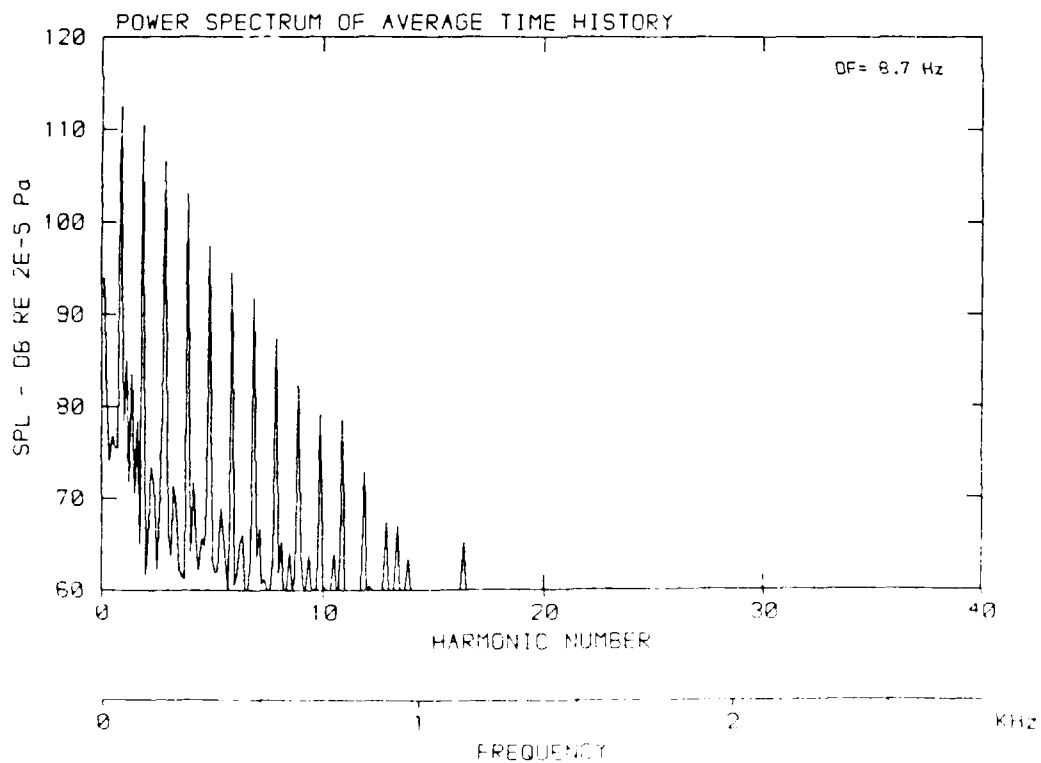
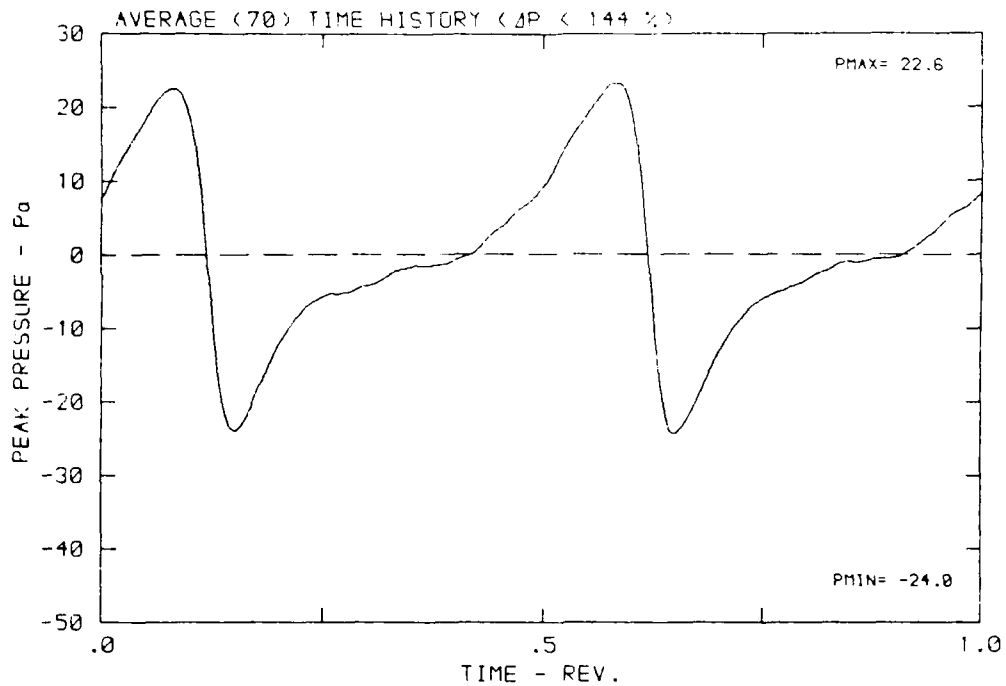
DATA POINT: EC-5 RUN: 134 MP: 8

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



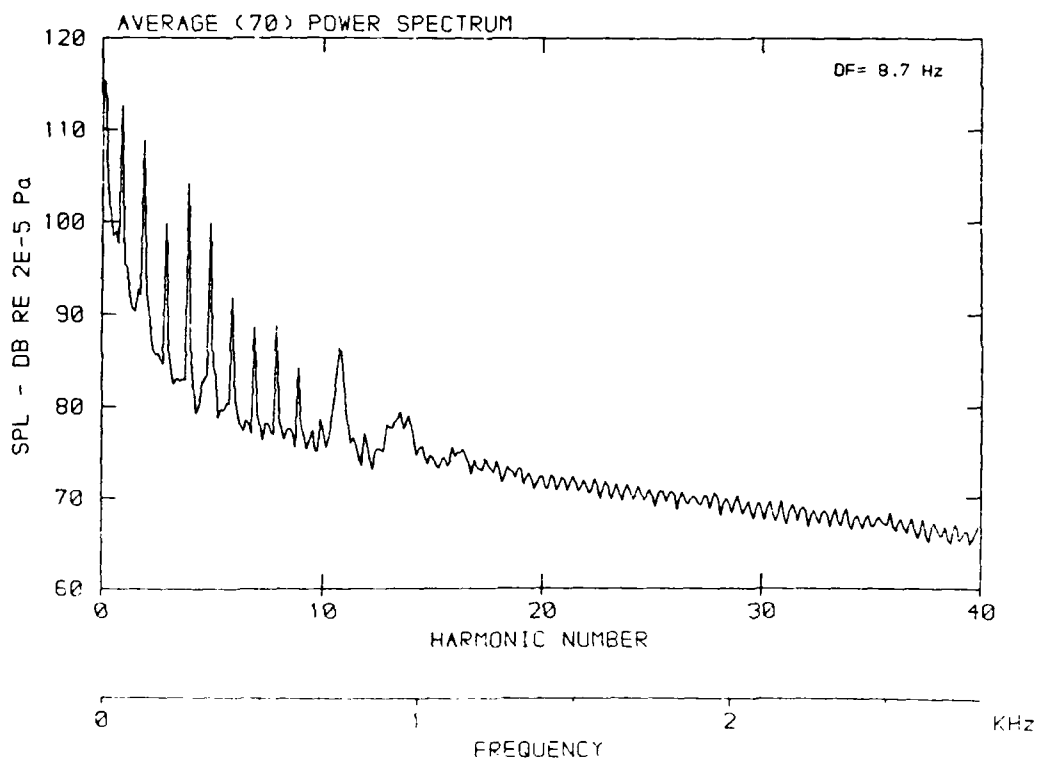
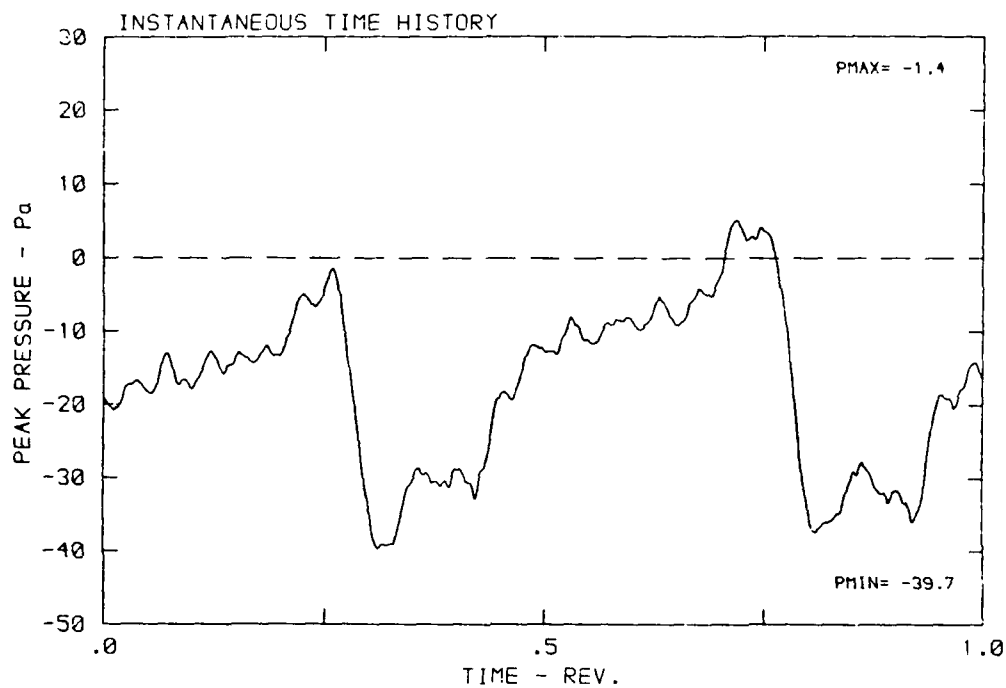
DATA POINT: EC-5 RUN: 134 MP: 8

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



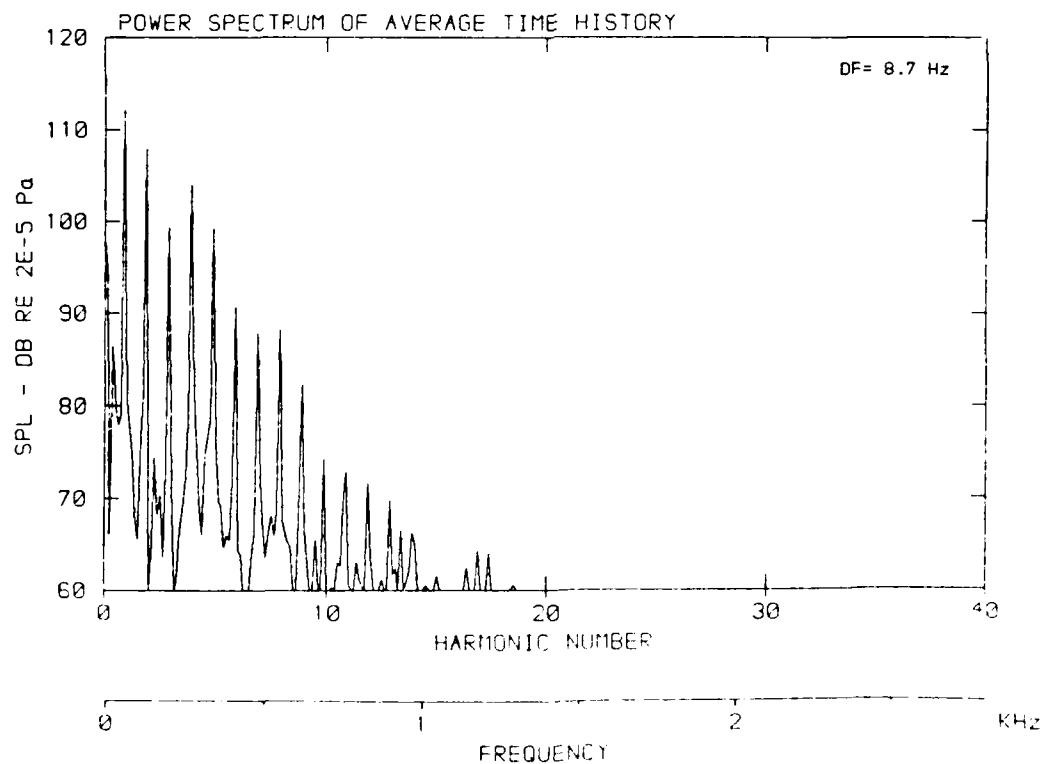
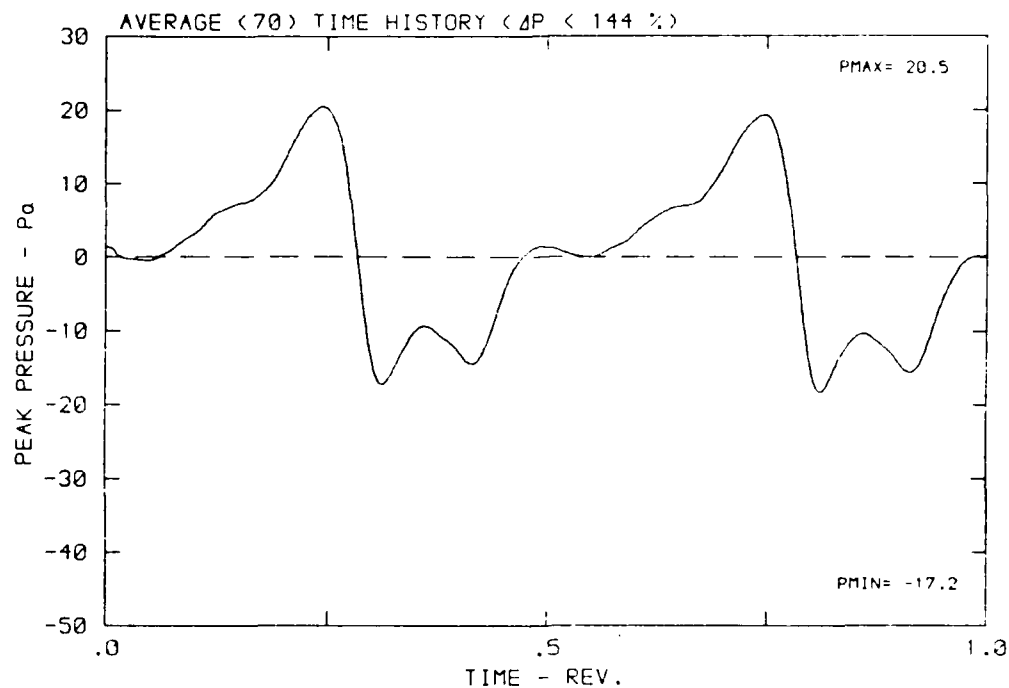
DATA POINT: EC-5 RUN: 134 MP: 9

β : 24.4° MH: .6738 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 288.2 K



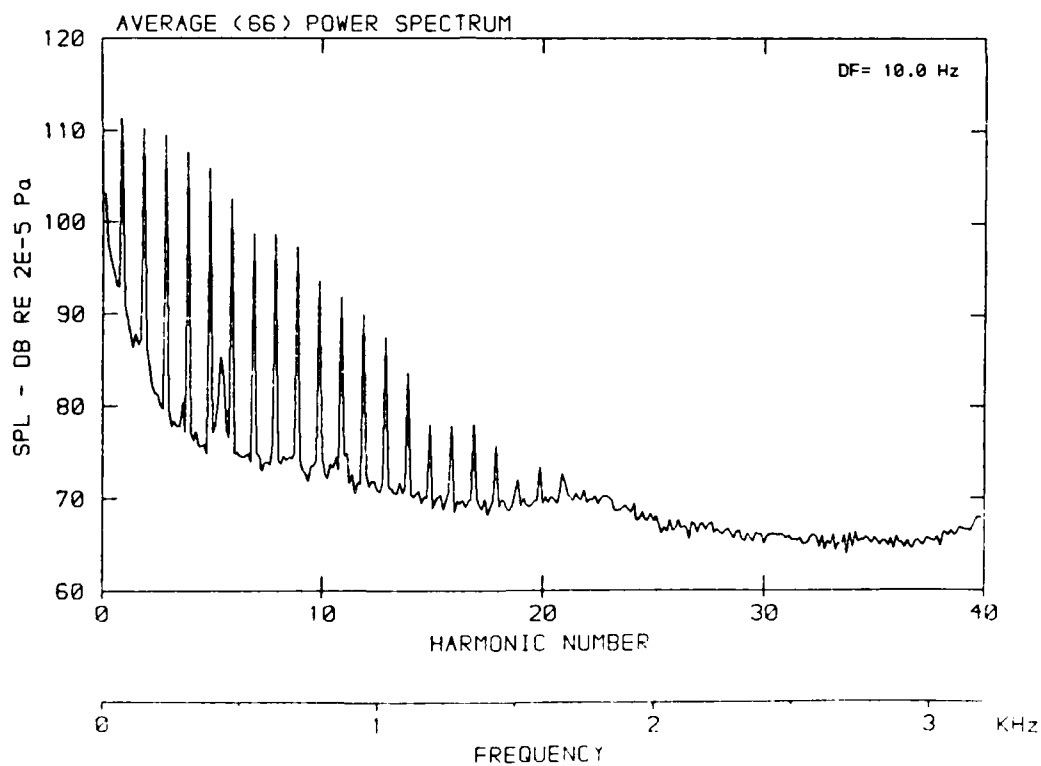
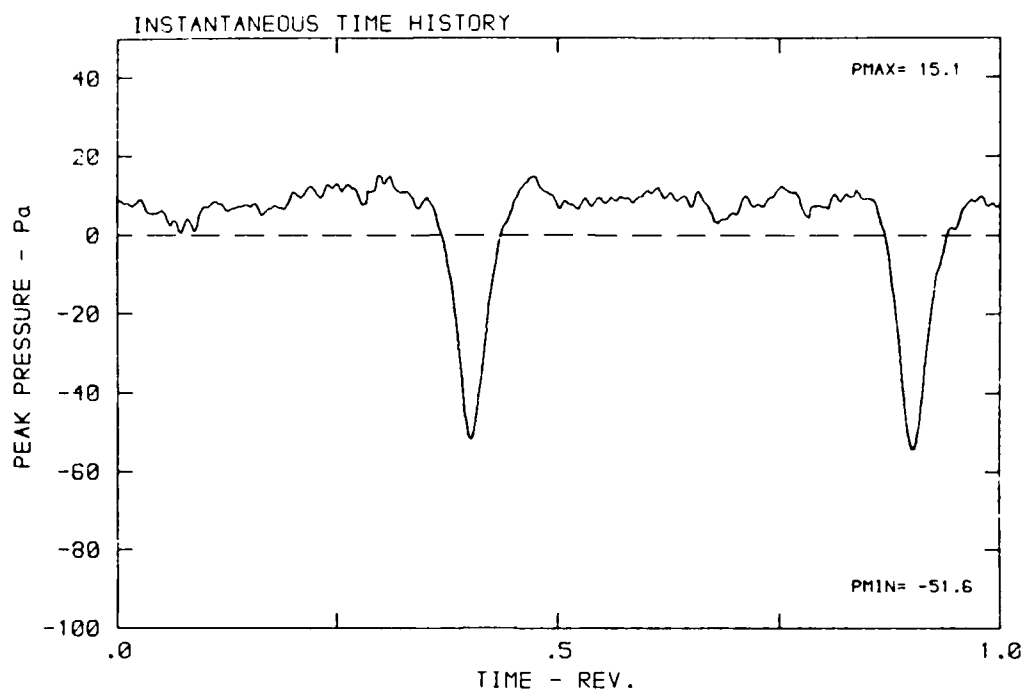
DATA POINT: EC-5 RUN: 134 MP: 9

β : 24.4° MH: .6738 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 288.2 K



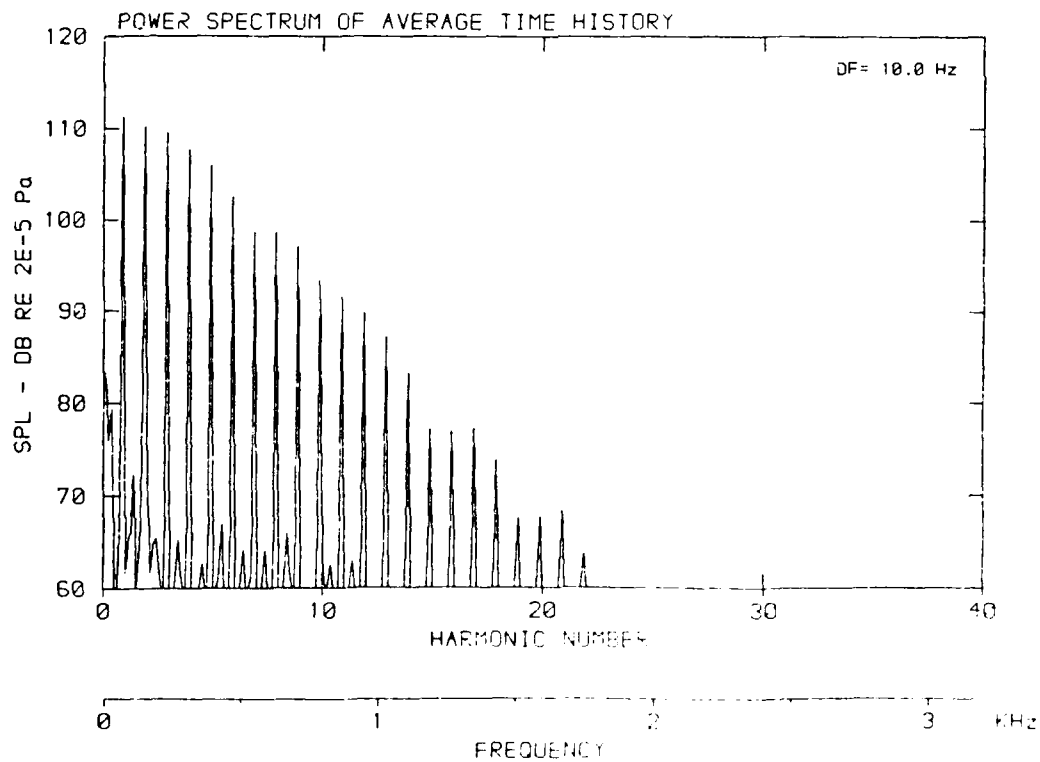
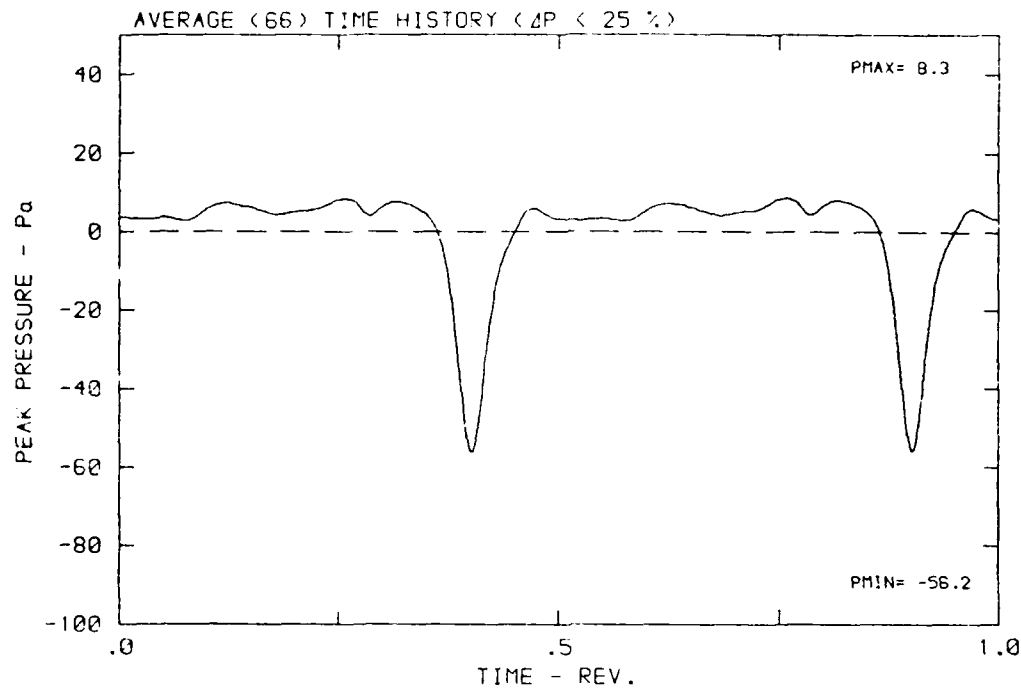
DATA POINT: EC-6 RUN: 135 MP: 1

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K



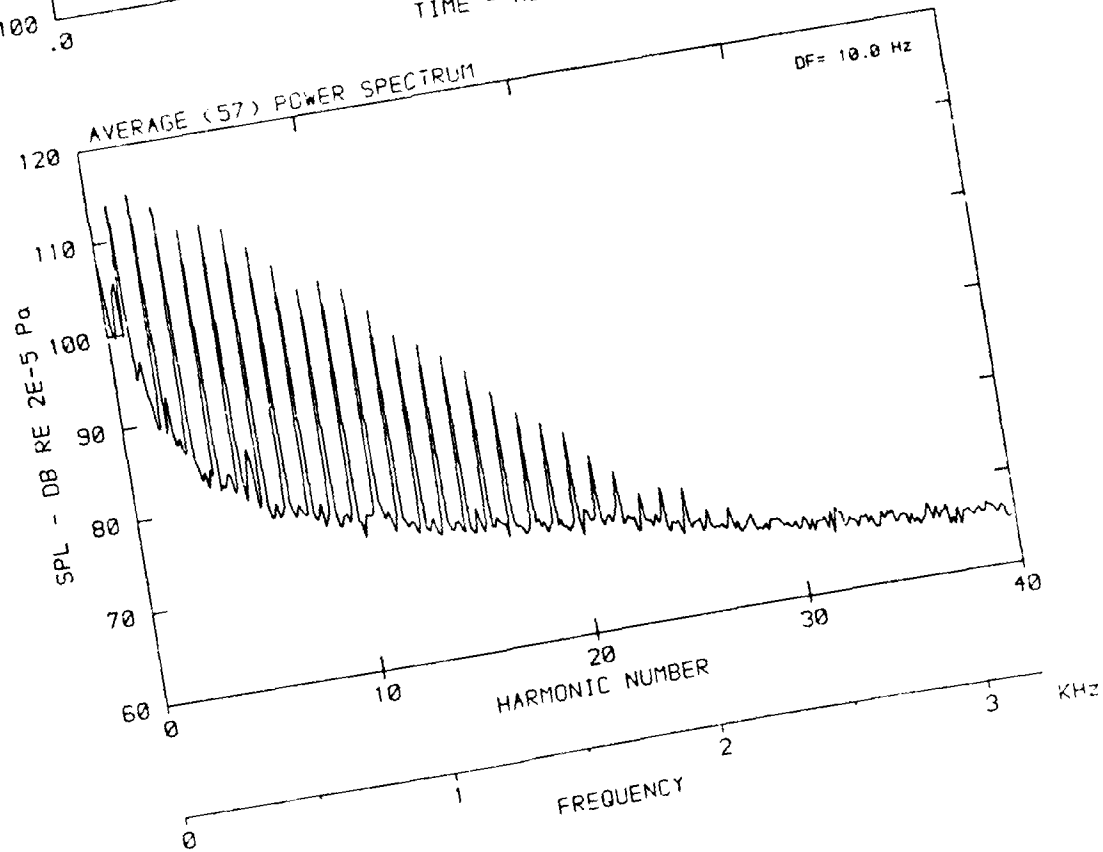
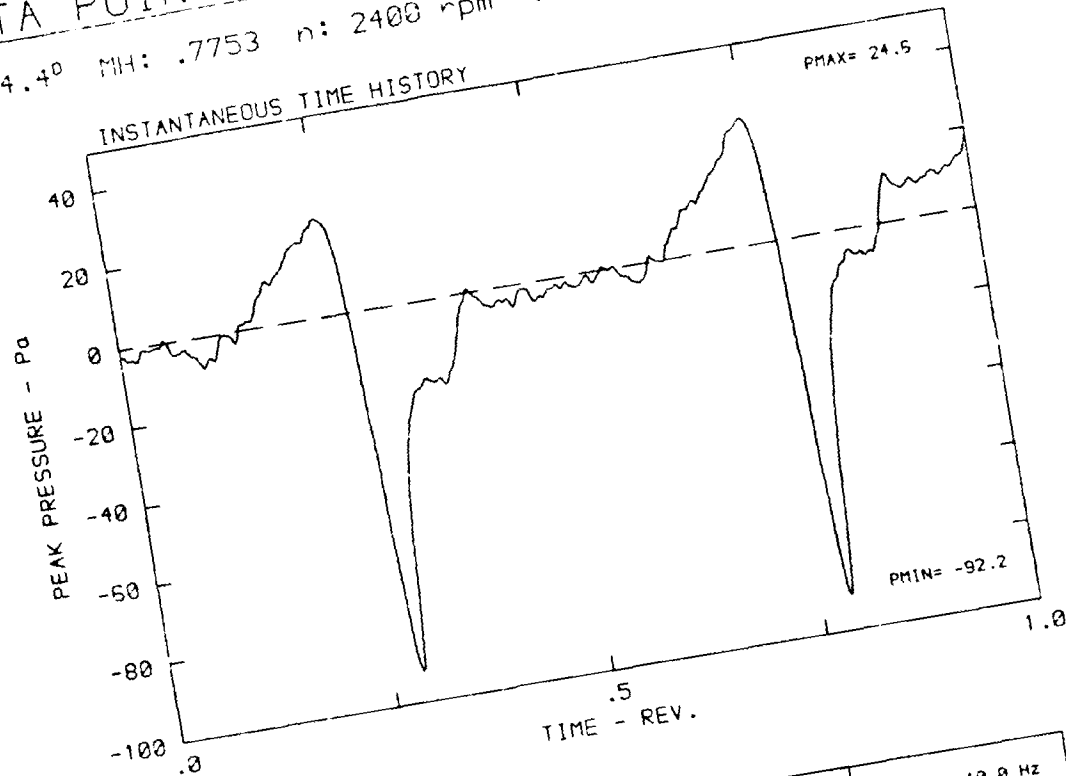
DATA POINT: EC-6 RUN: 135 MP: 1

β : 24.4° MH: .7753 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 288.5 K



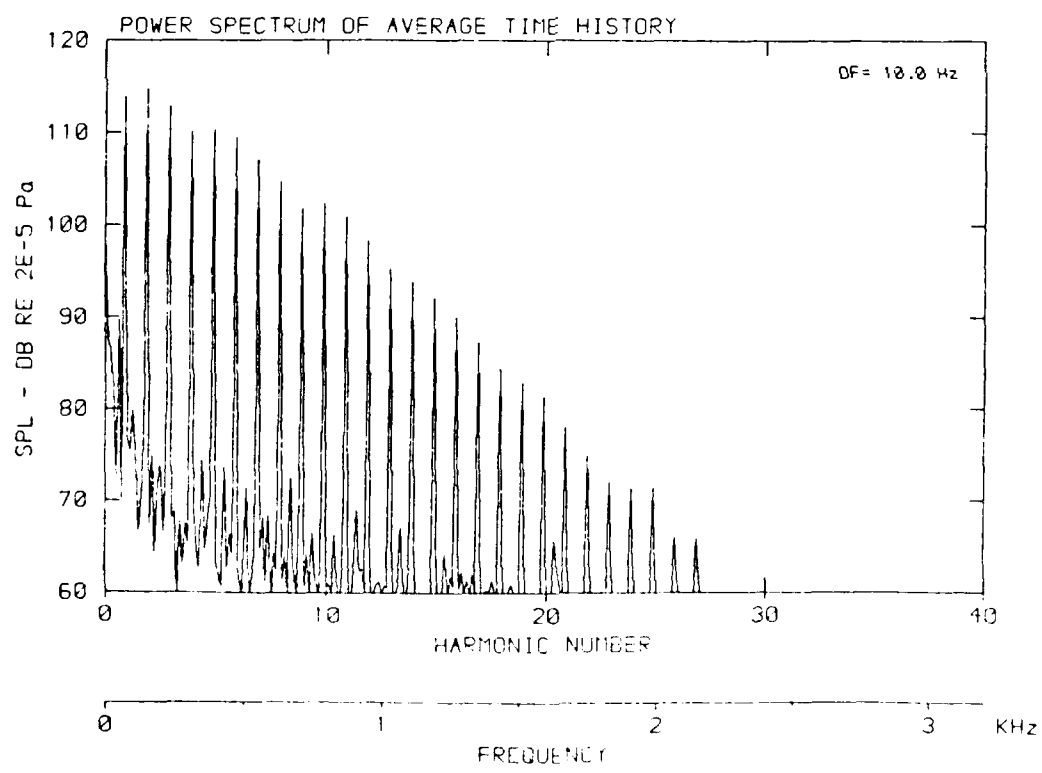
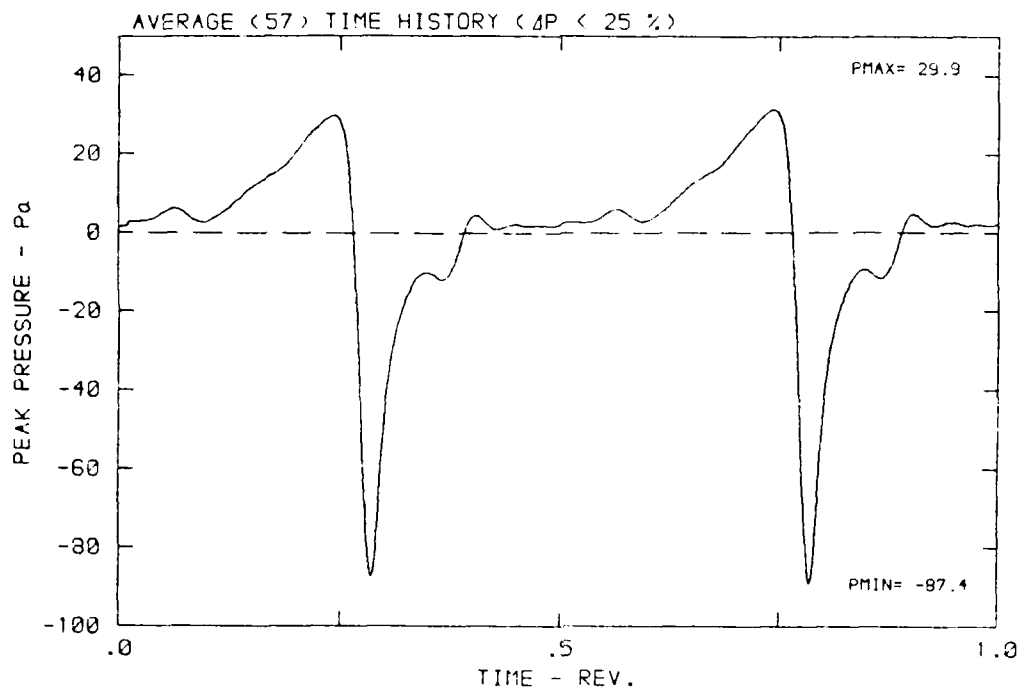
DATA POINT: EC-6 RUN: 135 MP: 2

β : 24.4° MH: .7753 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 288.5 K



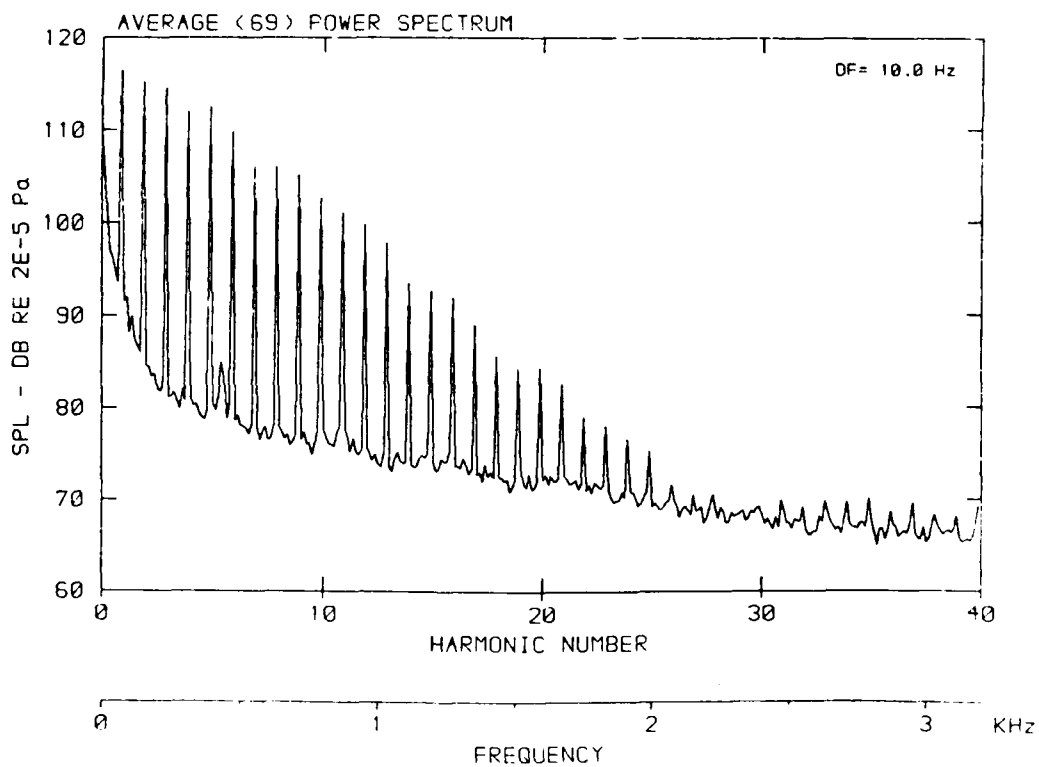
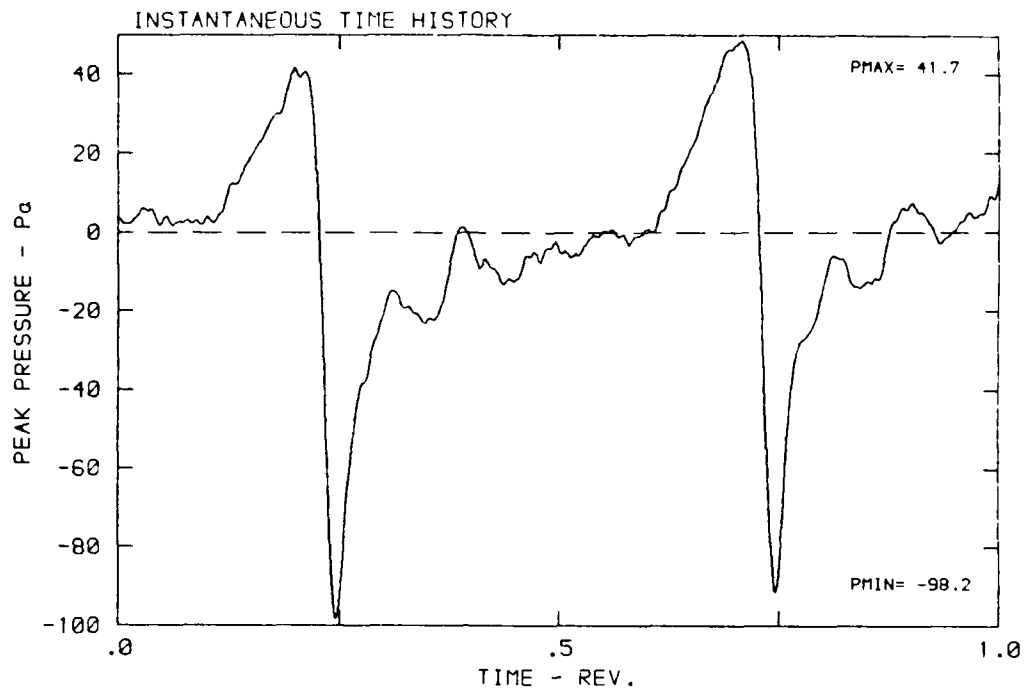
DATA POINT: EC-6 RUN: 135 MP: 2

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K



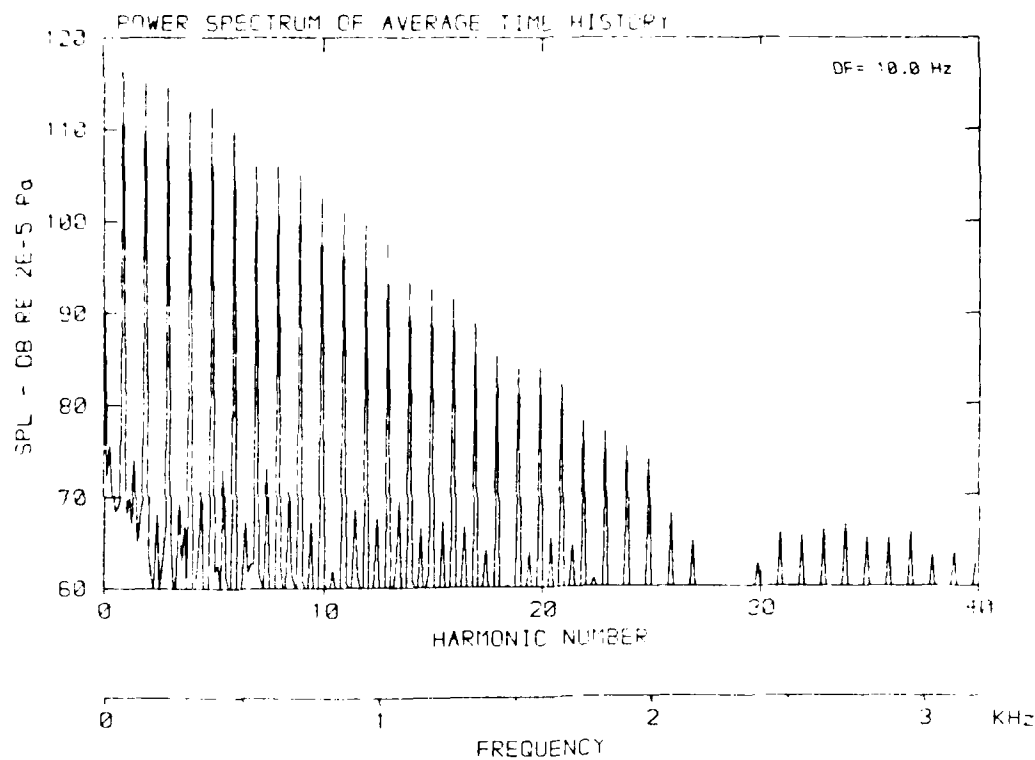
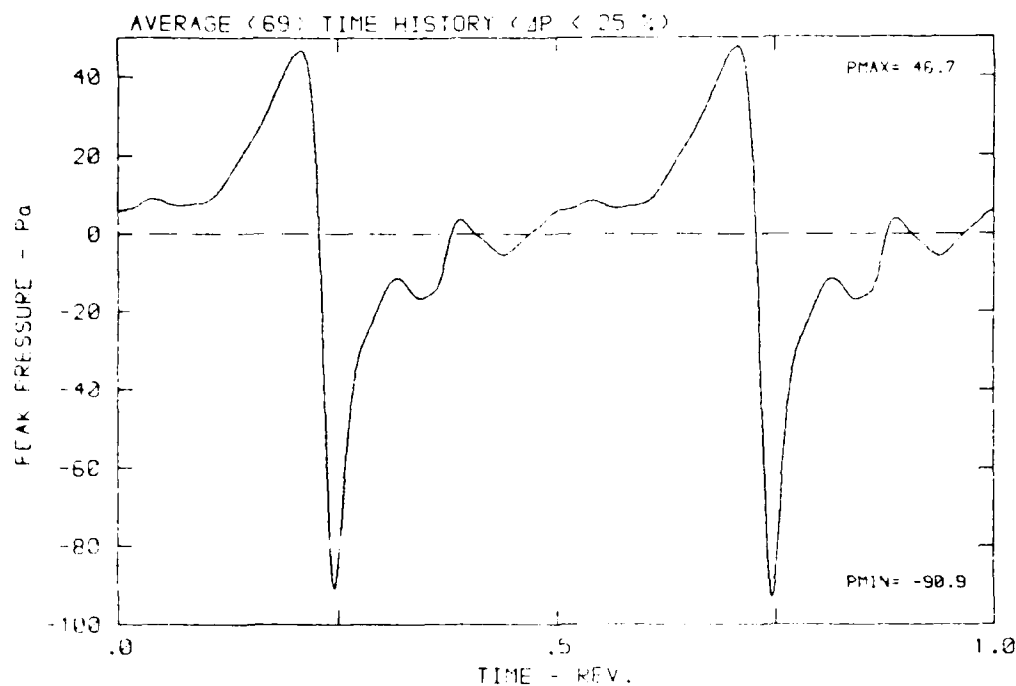
DATA POINT: EC-6 RUN: 135 MP: 3

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 289.5 K



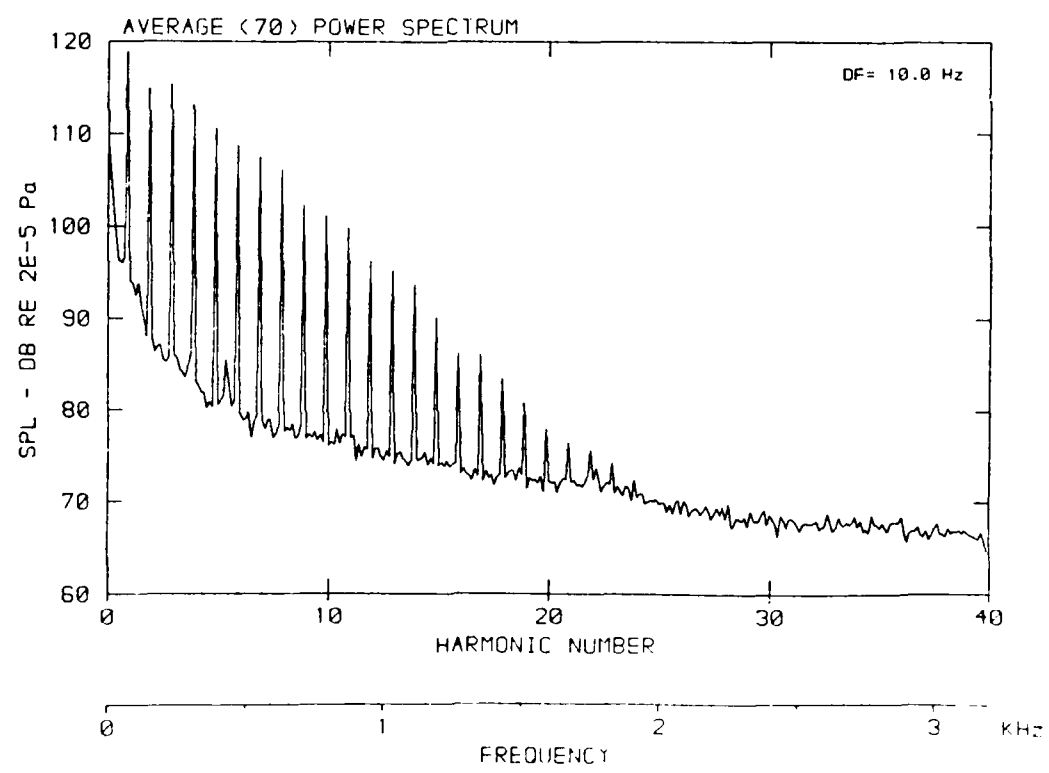
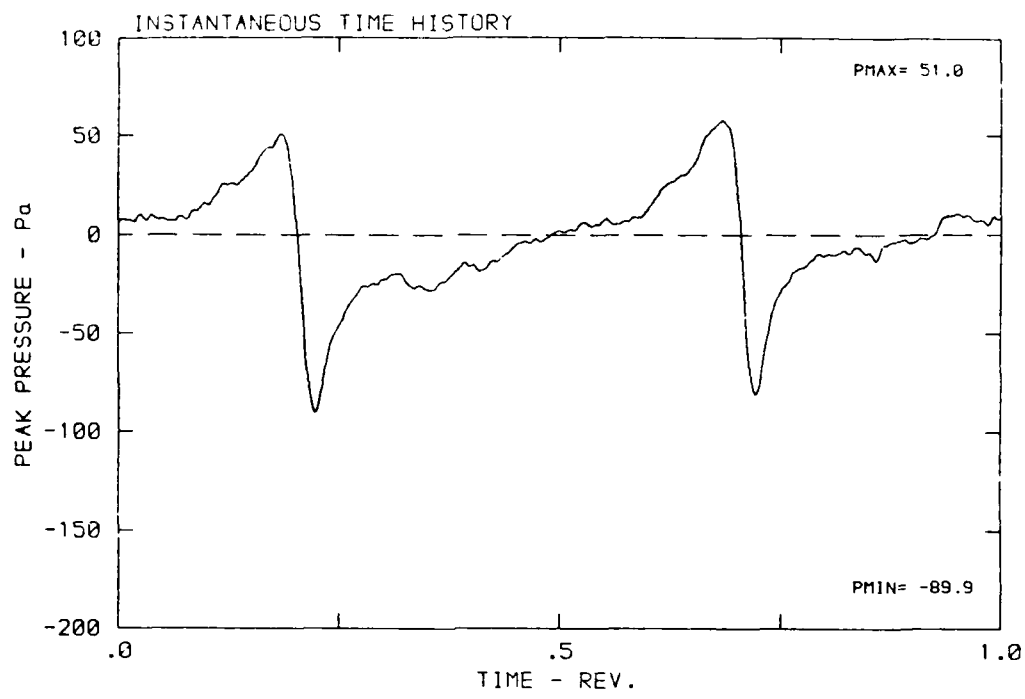
DATA POINT: EC-6 RUN: 135 MP: 3

β : 24.4° MH: .7753 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 288.5 K



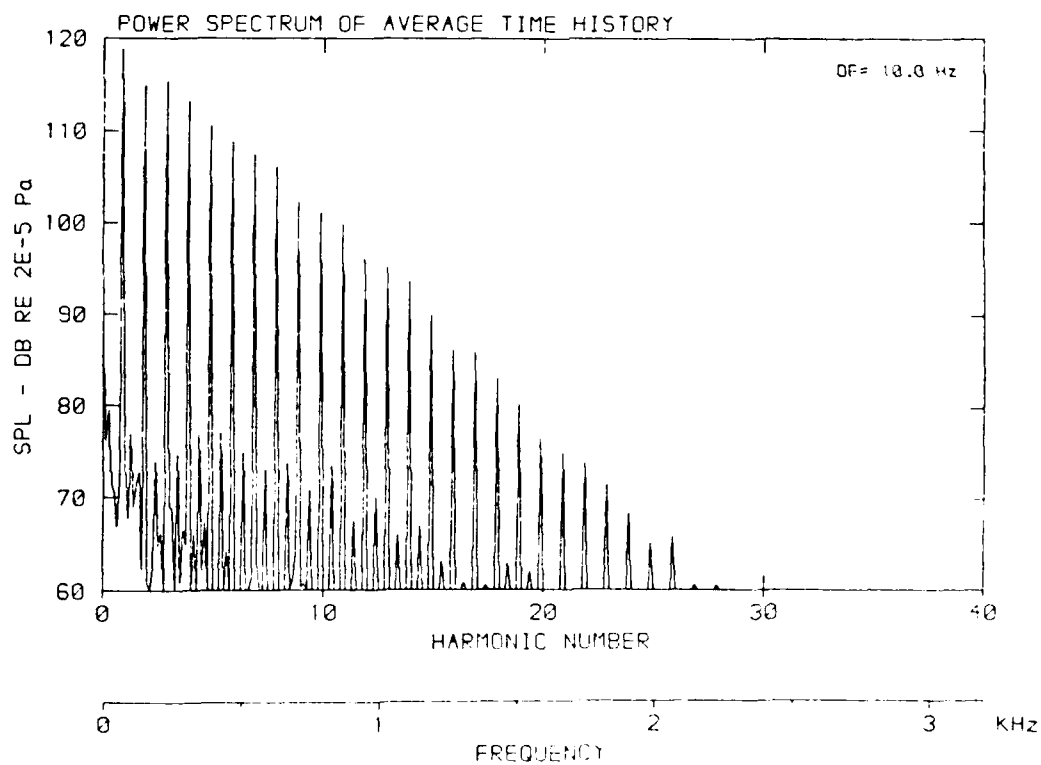
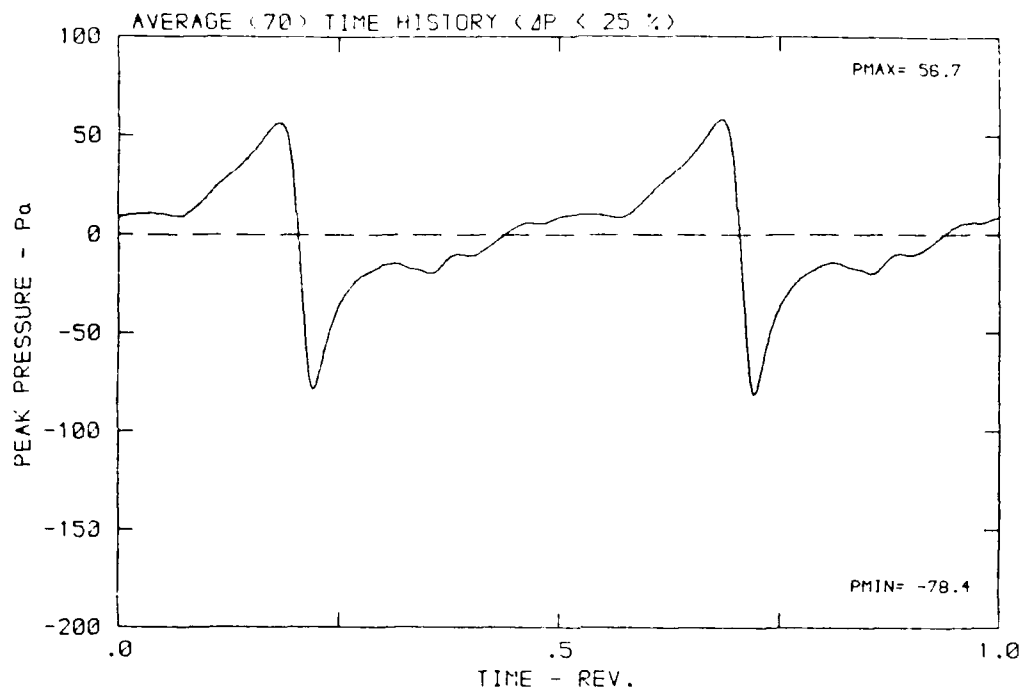
DATA POINT: EC-6 RUN: 135 MP: 4

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 268.5 K



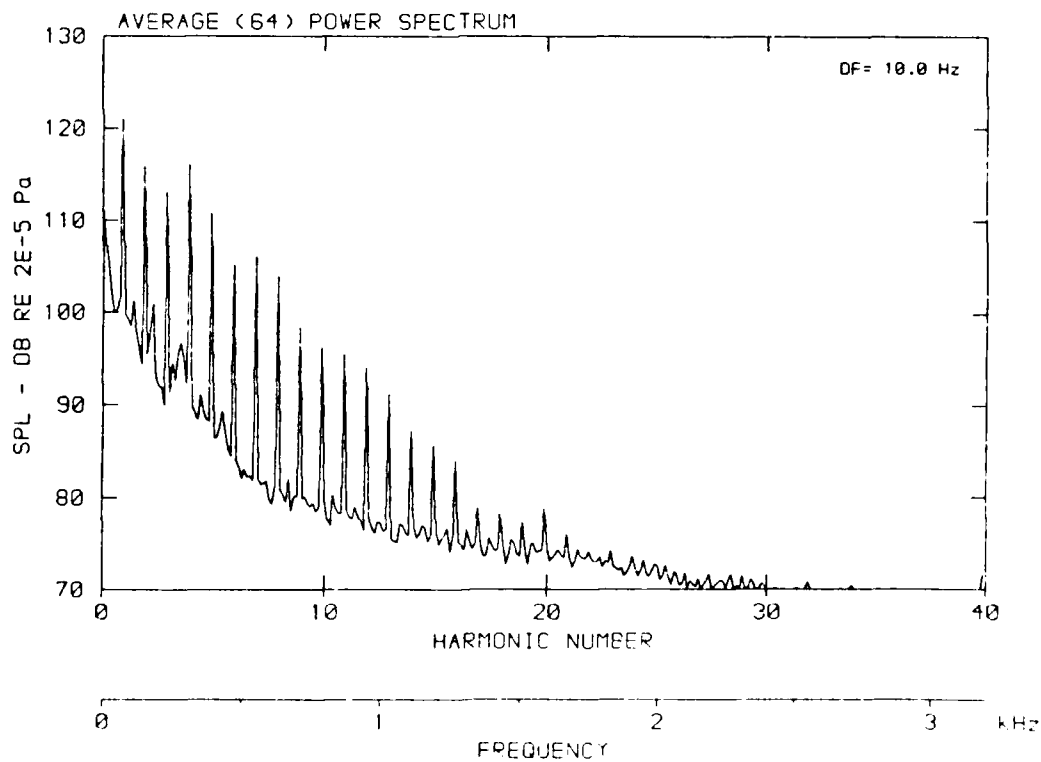
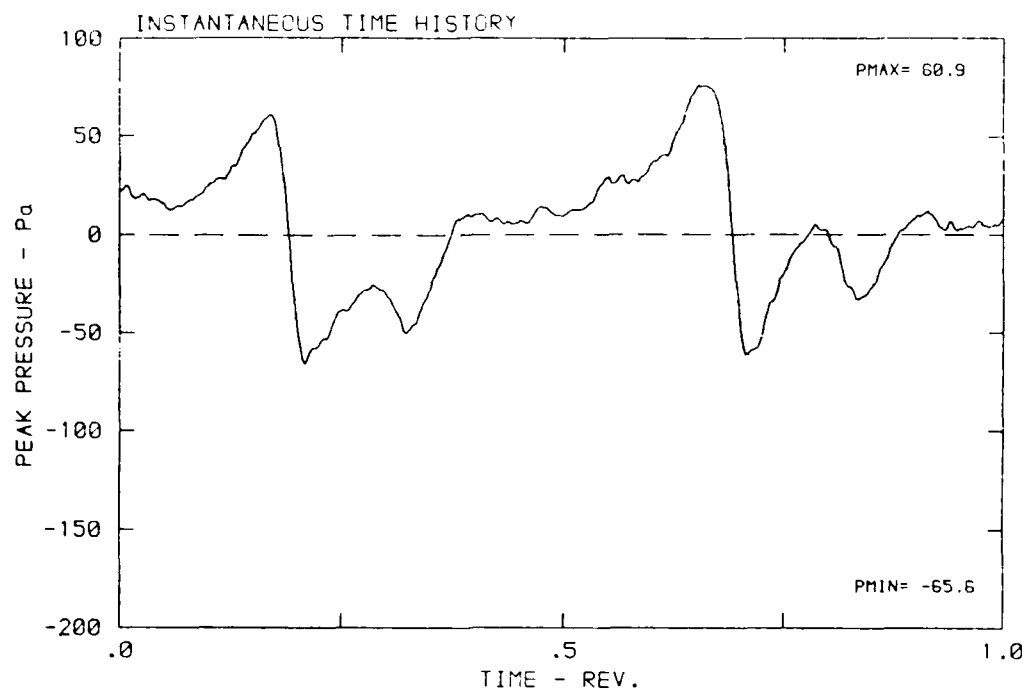
DATA POINT: EC-6 RUN: 135 MP: 4

β : 24.4° MH: .7753 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 288.5 K



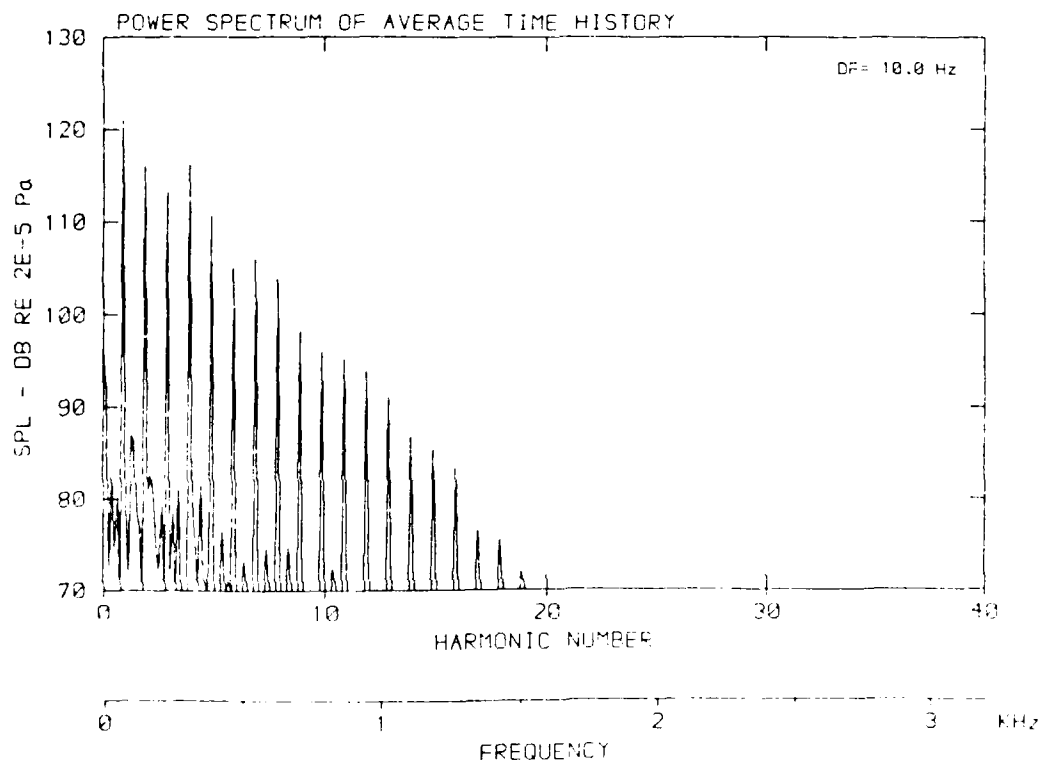
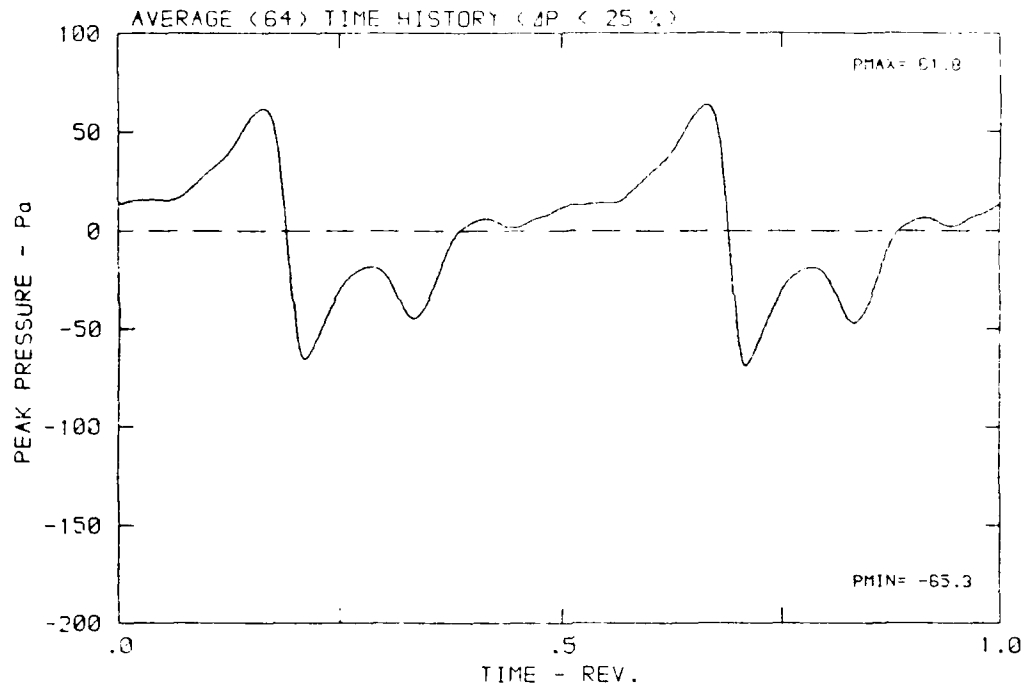
DATA POINT: EC-6 RUN: 135 MP: 5

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K



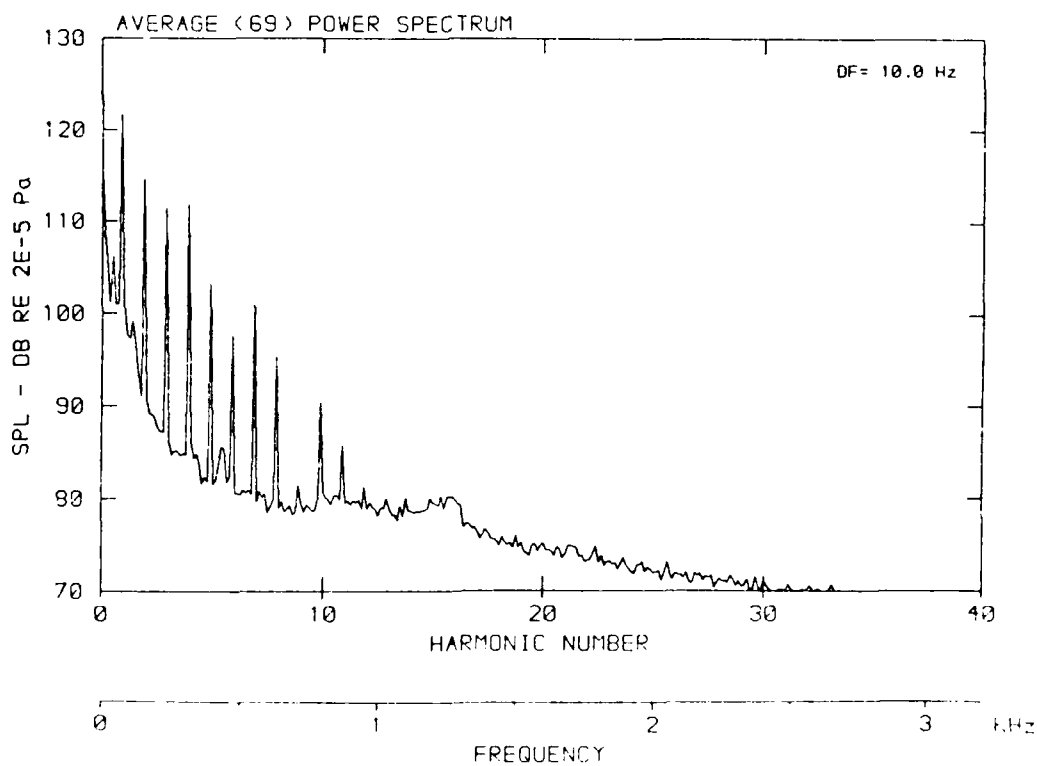
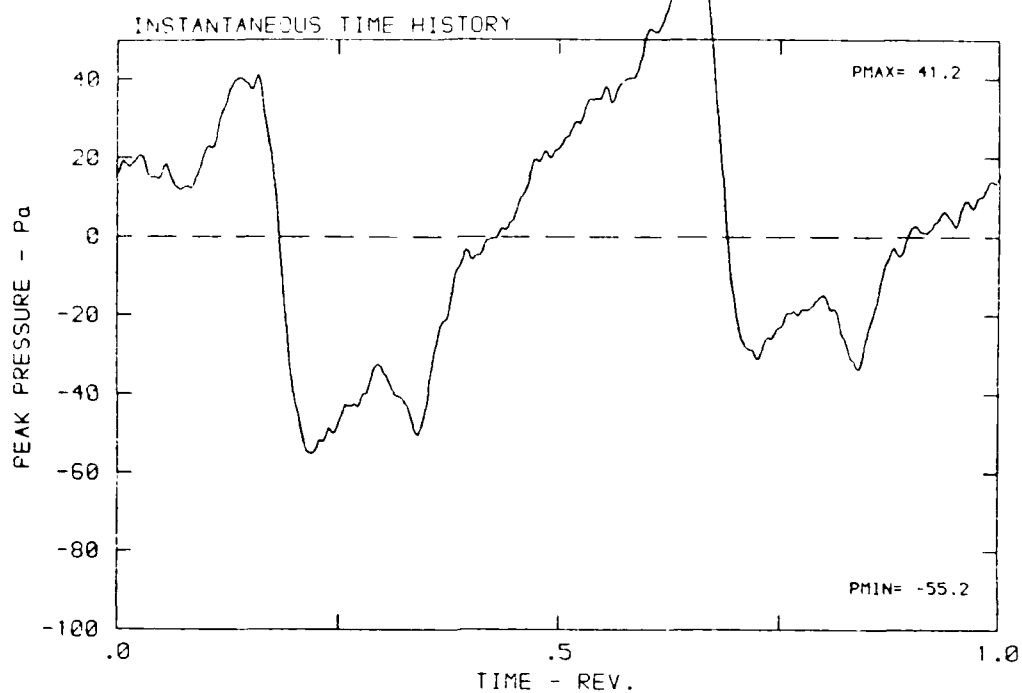
DATA POINT: EC-6 RUN: 135 MP: 5

β : 24.4° MH: .7753 n: 2400 rpm v/u : .263 ϕ : 7.3° I: 288.5 k



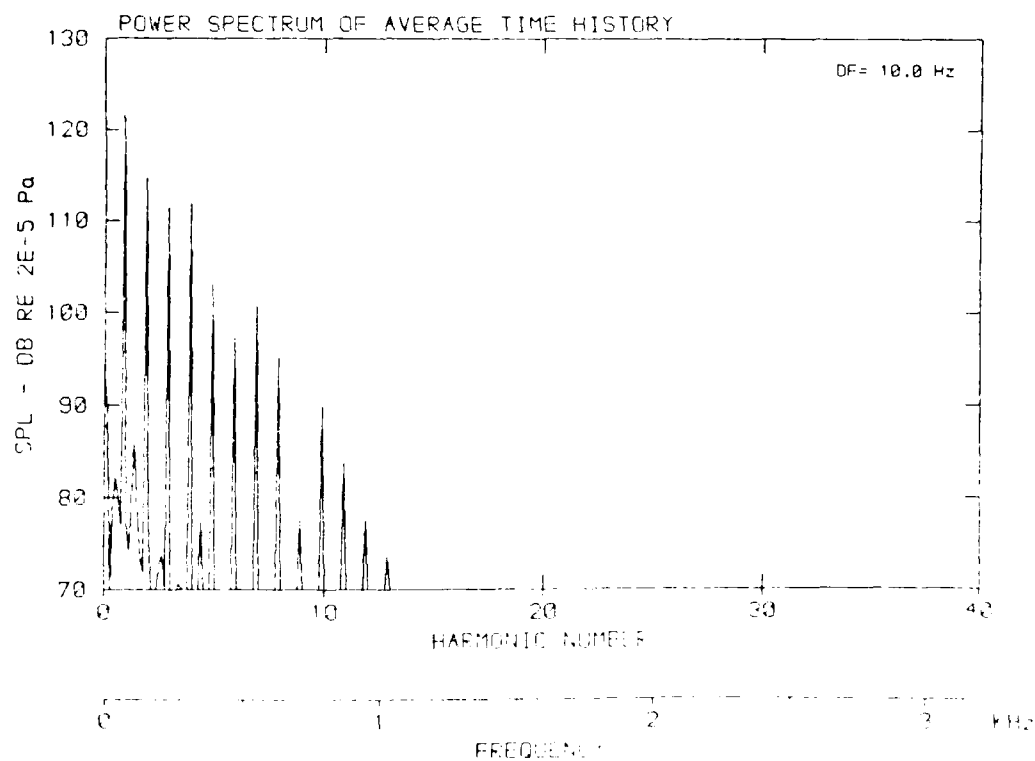
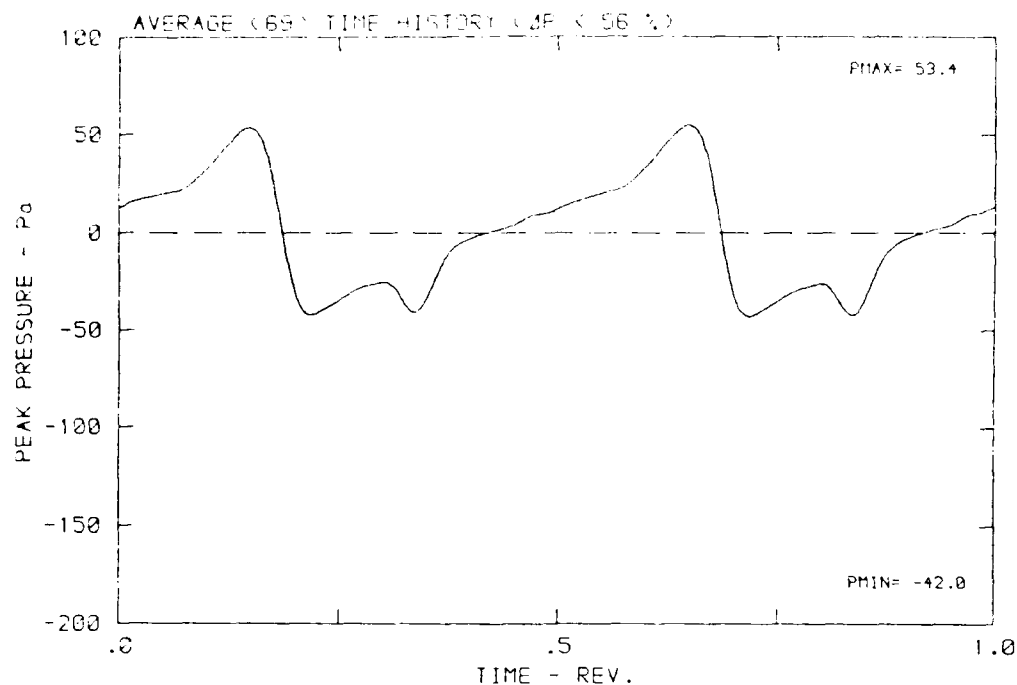
DATA POINT: EC-6 RUN: 135 MP: 6

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 286.5



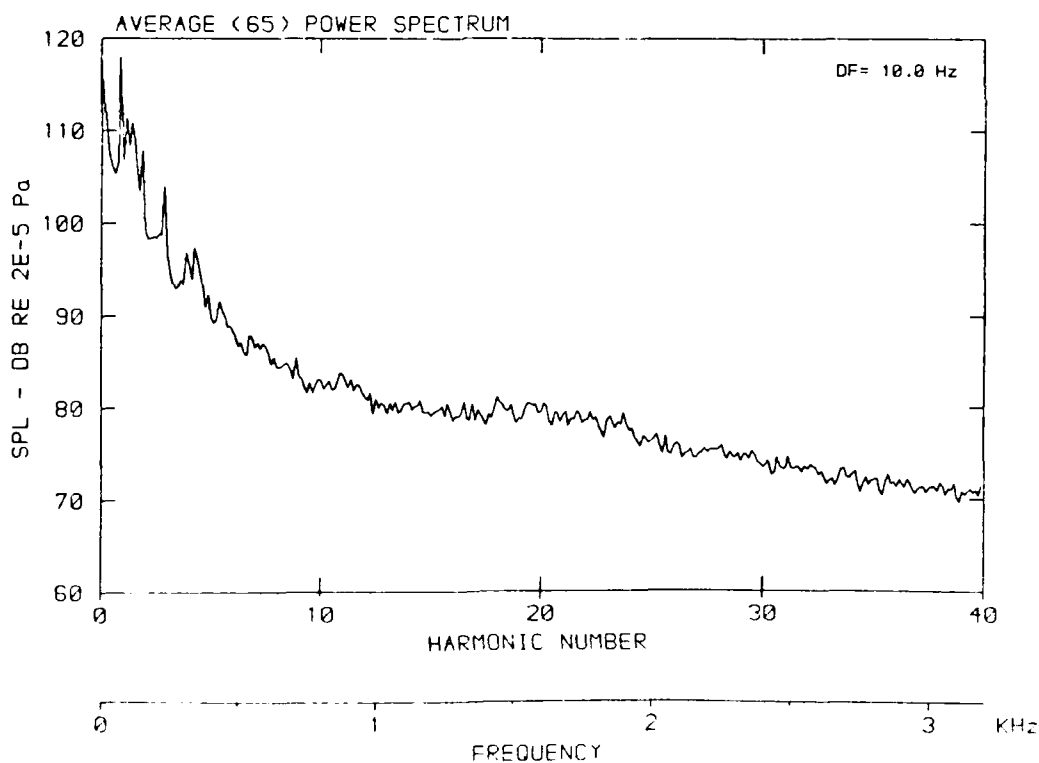
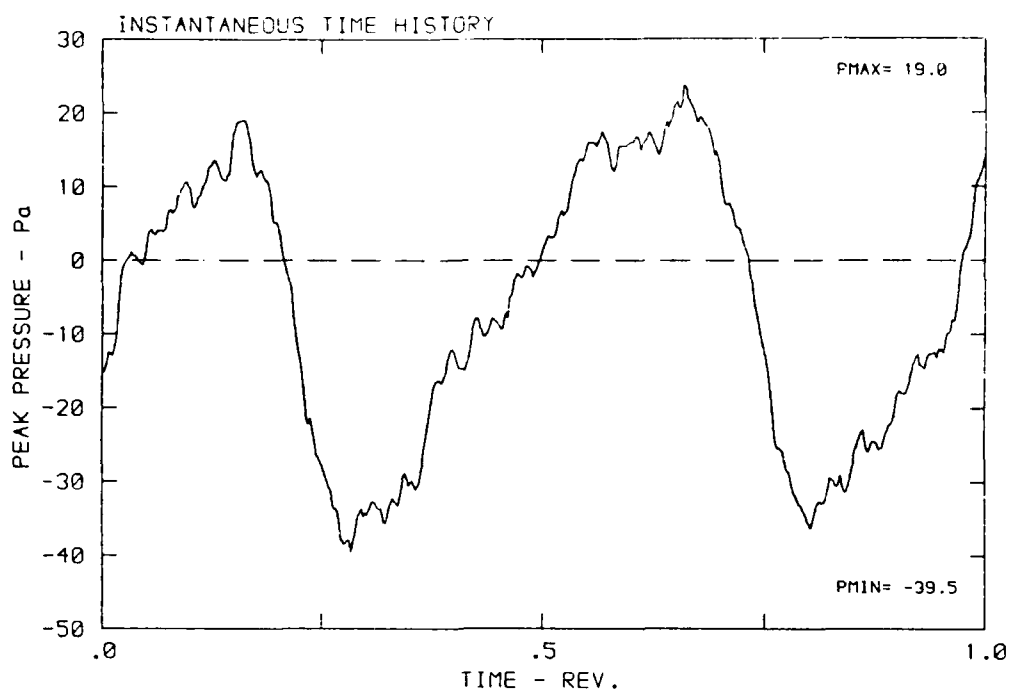
DATA POINT: EC-6 RUN: 135 MP: 6

β : 24.4° MH: .7753 n: 2400 rpm ν : .263 ϕ : 7.3° T: 288.5 K



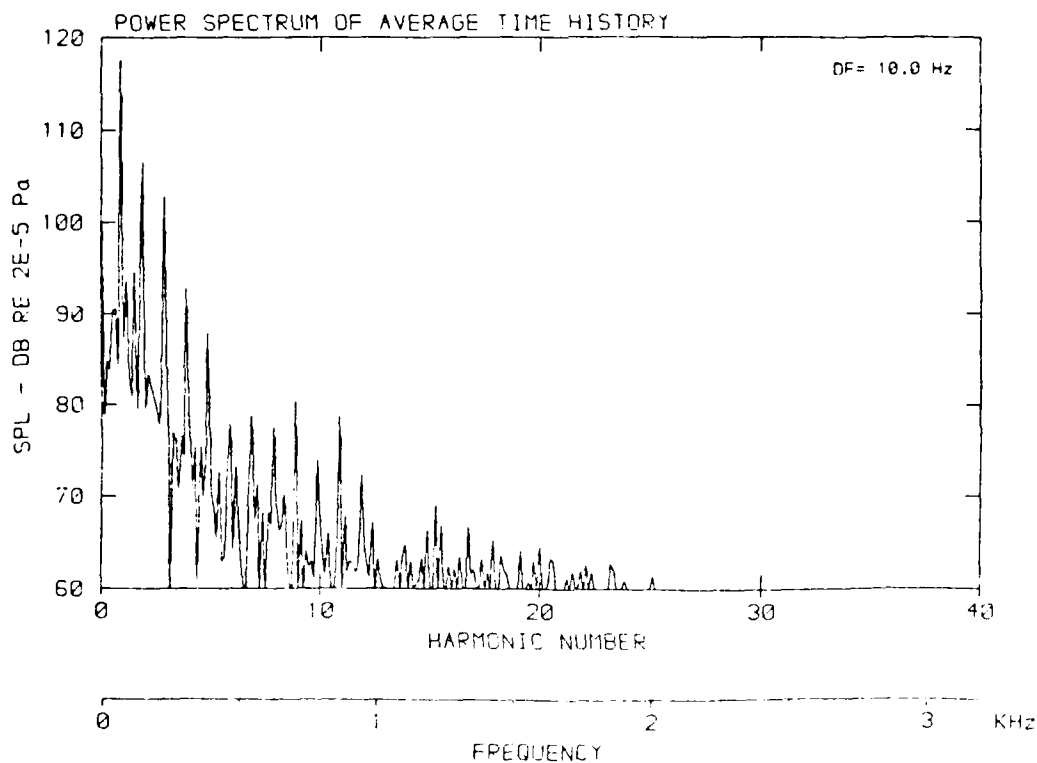
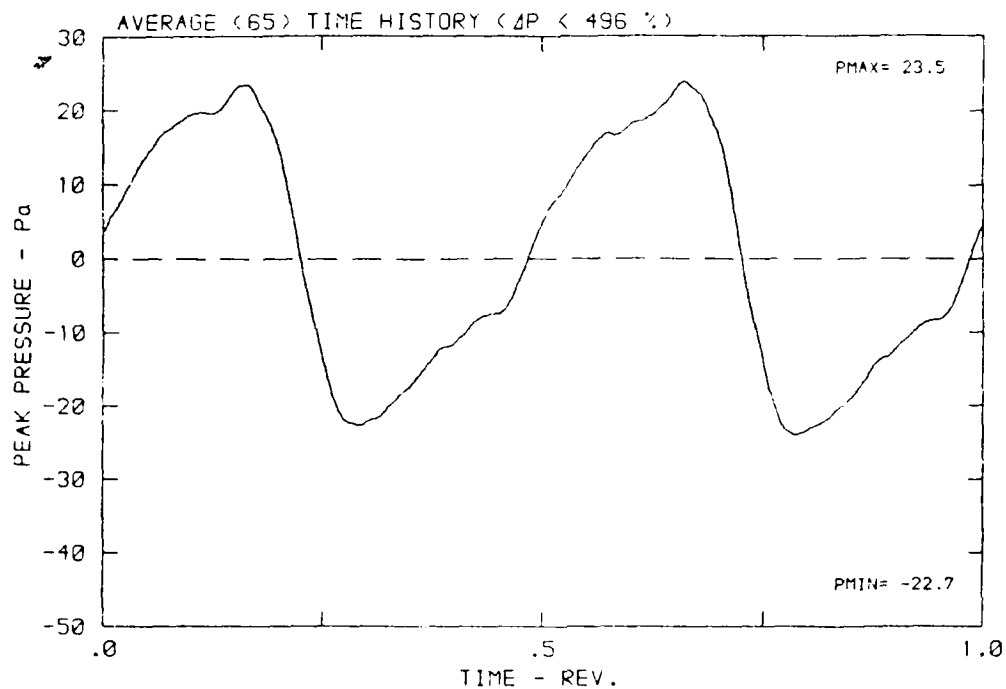
DATA POINT: EC-6 RUN: 135 MP: 7

β : 24.4° MH: .7753 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 288.5 K



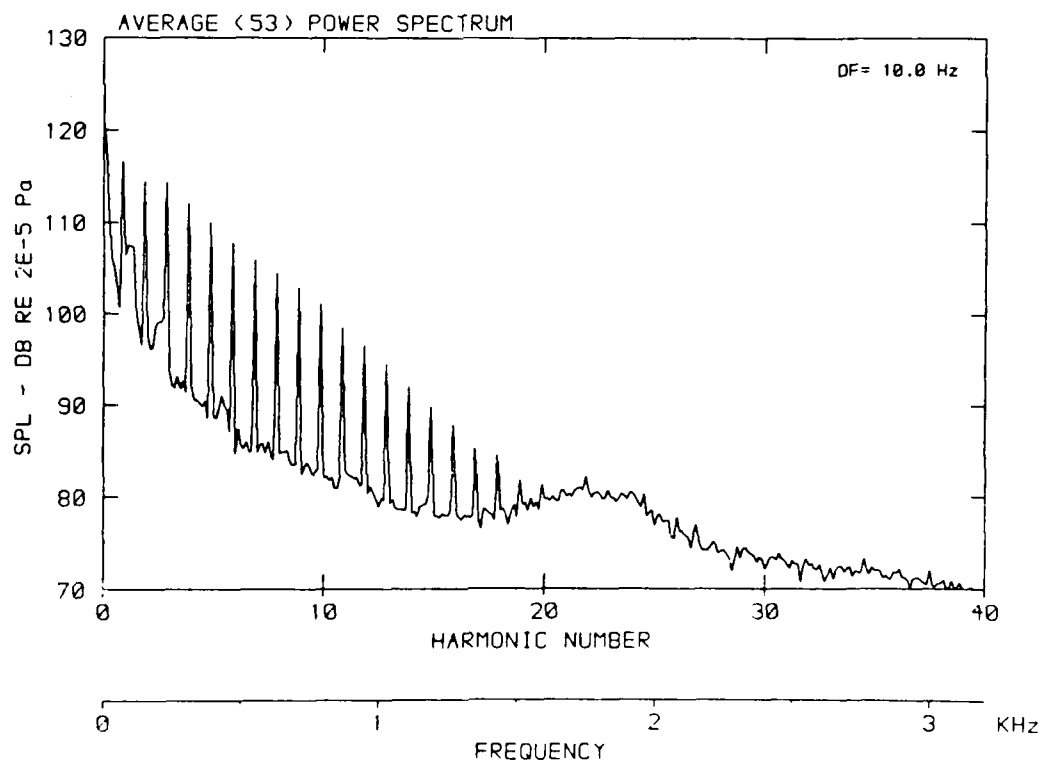
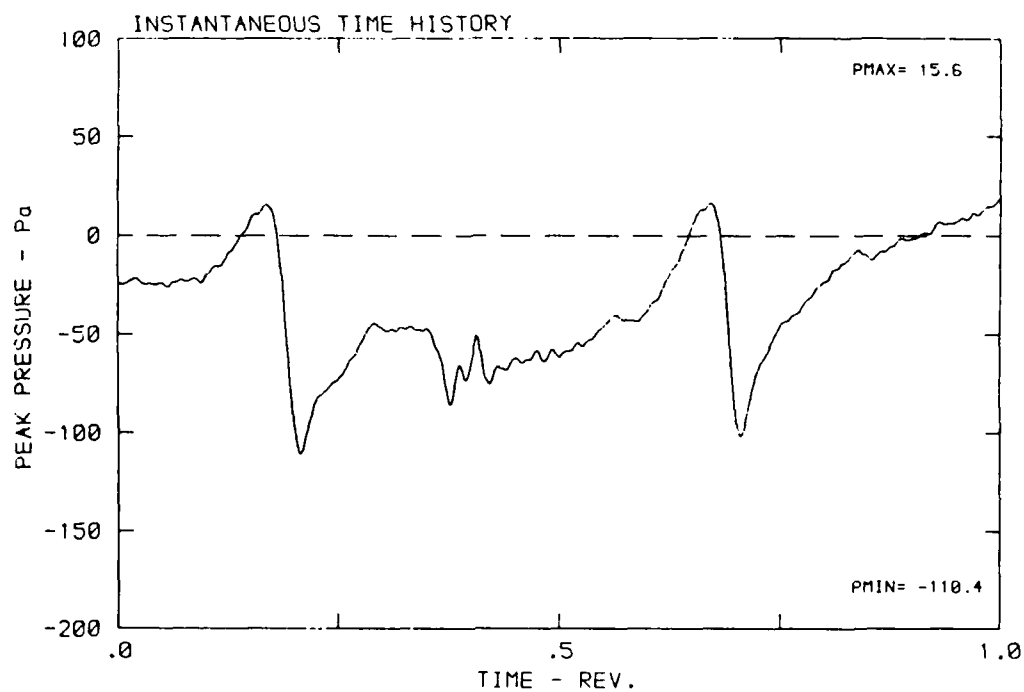
DATA POINT: EC-6 RUN: 135 MP: 7

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K



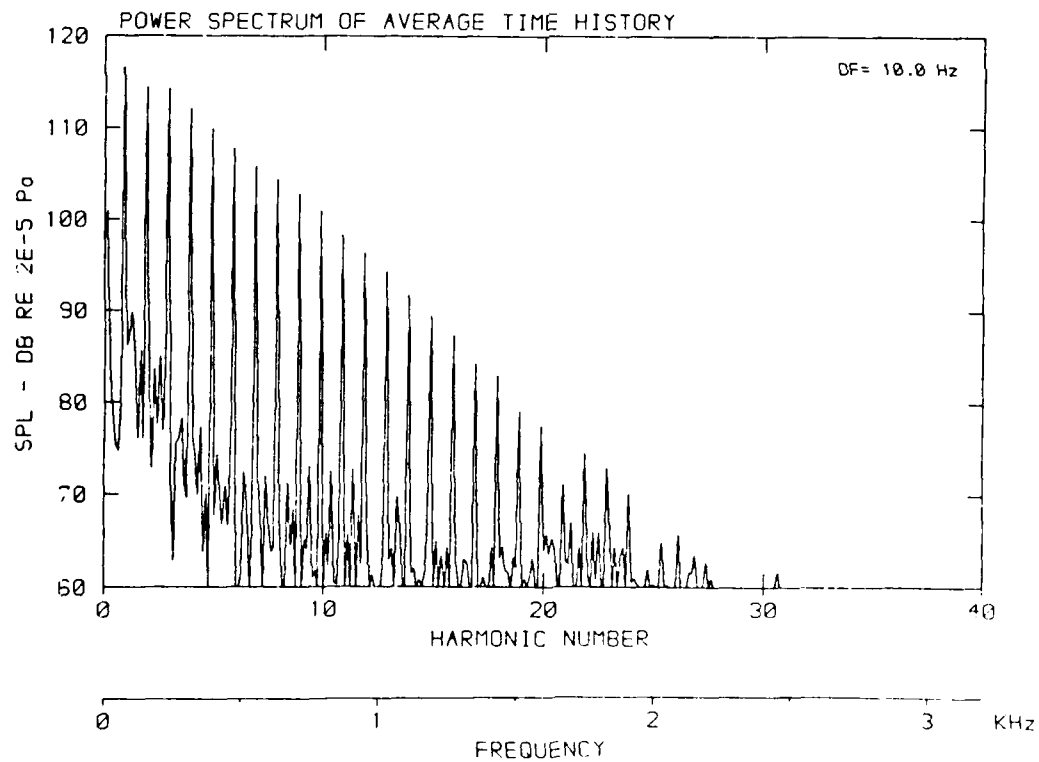
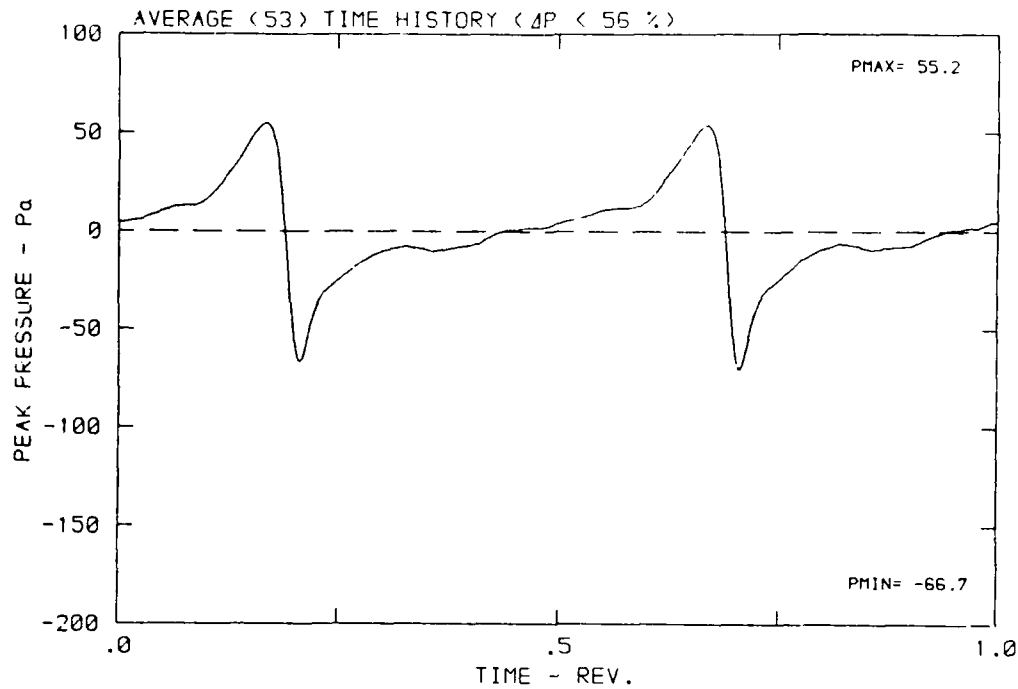
DATA POINT: EC-6 RUN: 135 MP: 8

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K



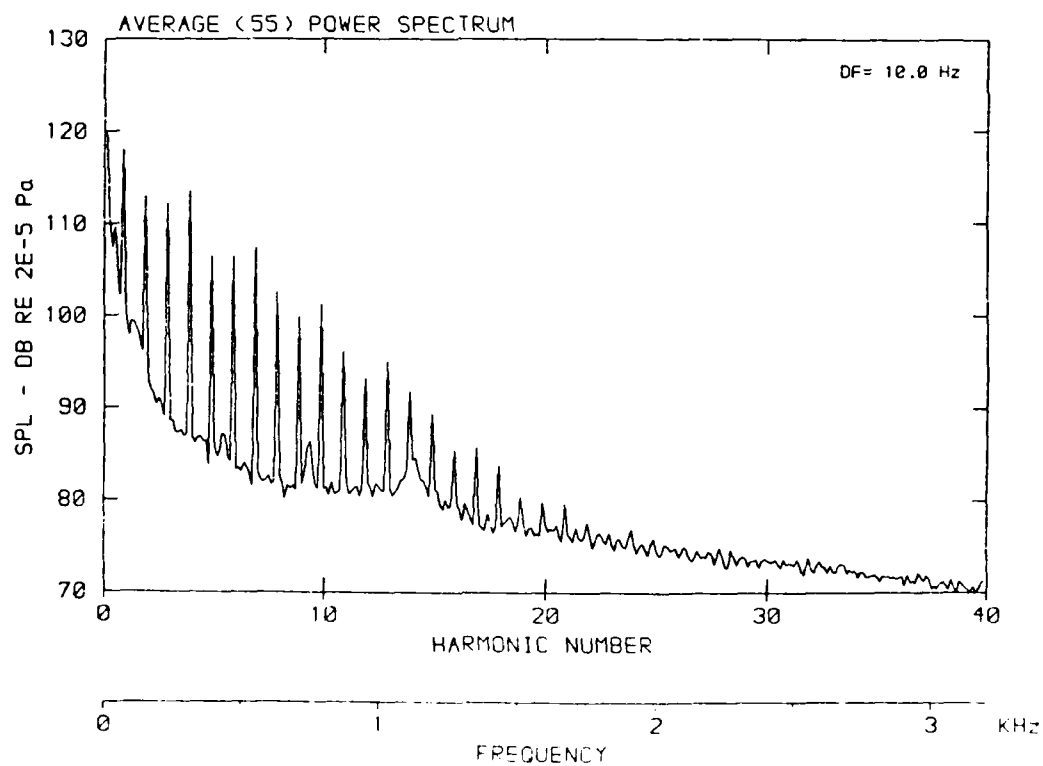
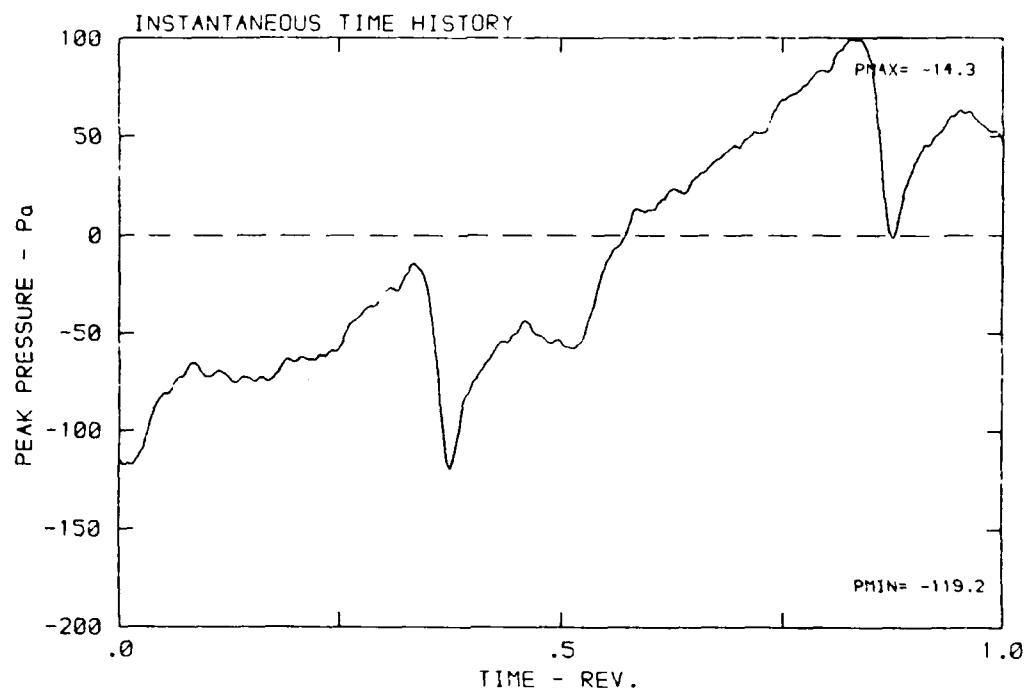
DATA POINT: EC-6 RUN: 135 MP: 8

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K



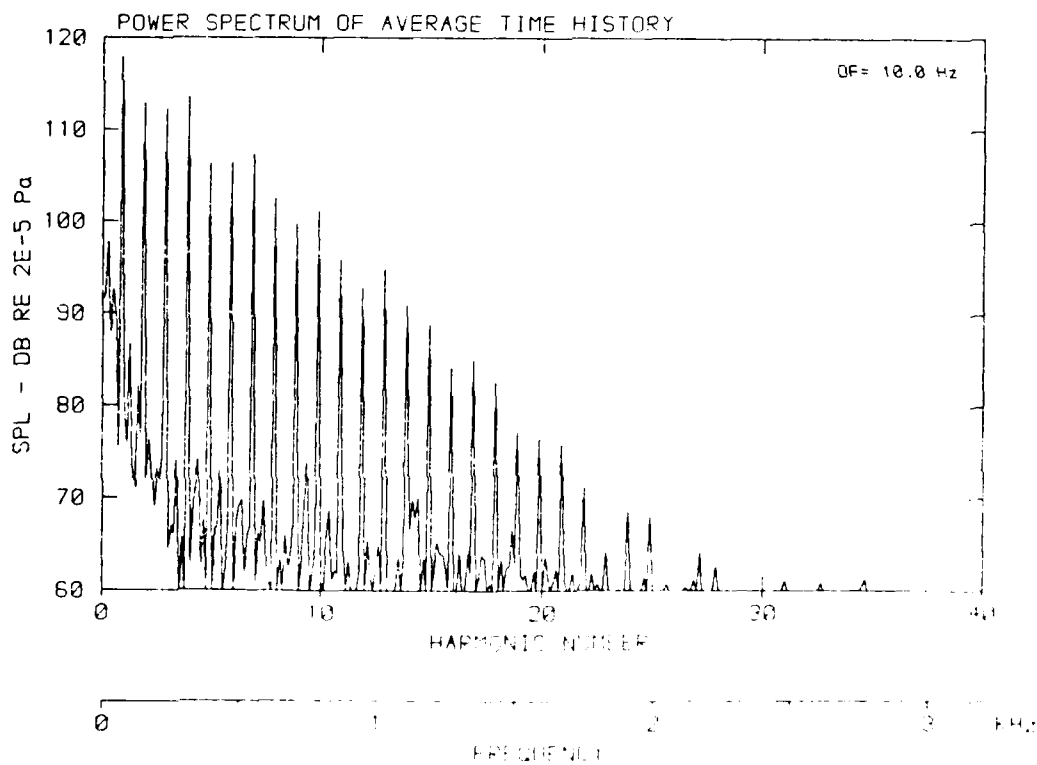
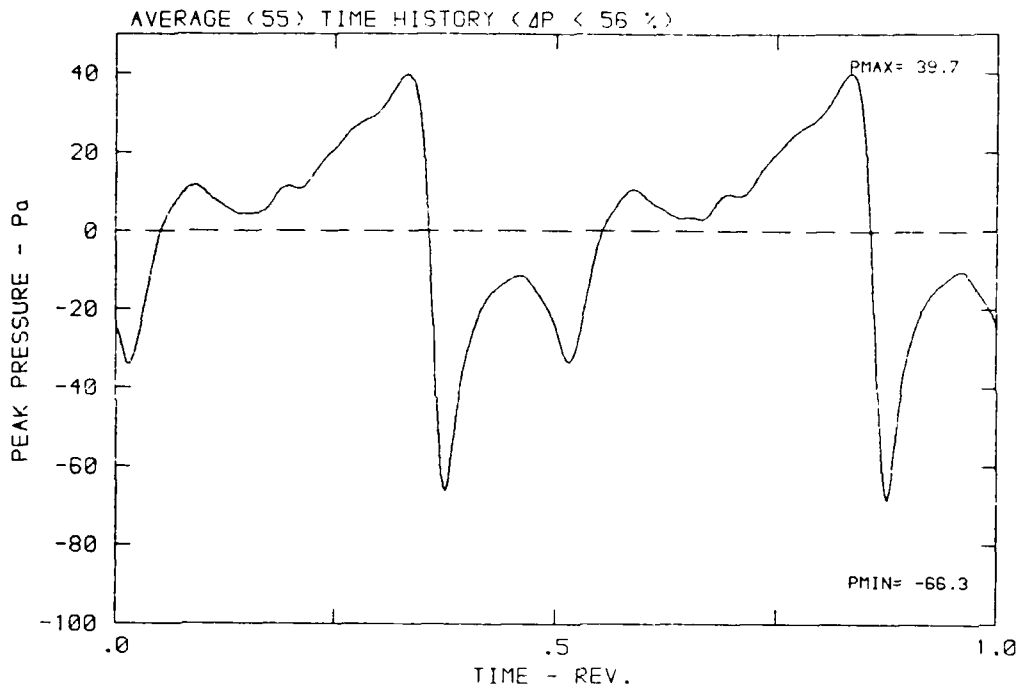
DATA POINT: EC-6 RUN: 135 MP: 9

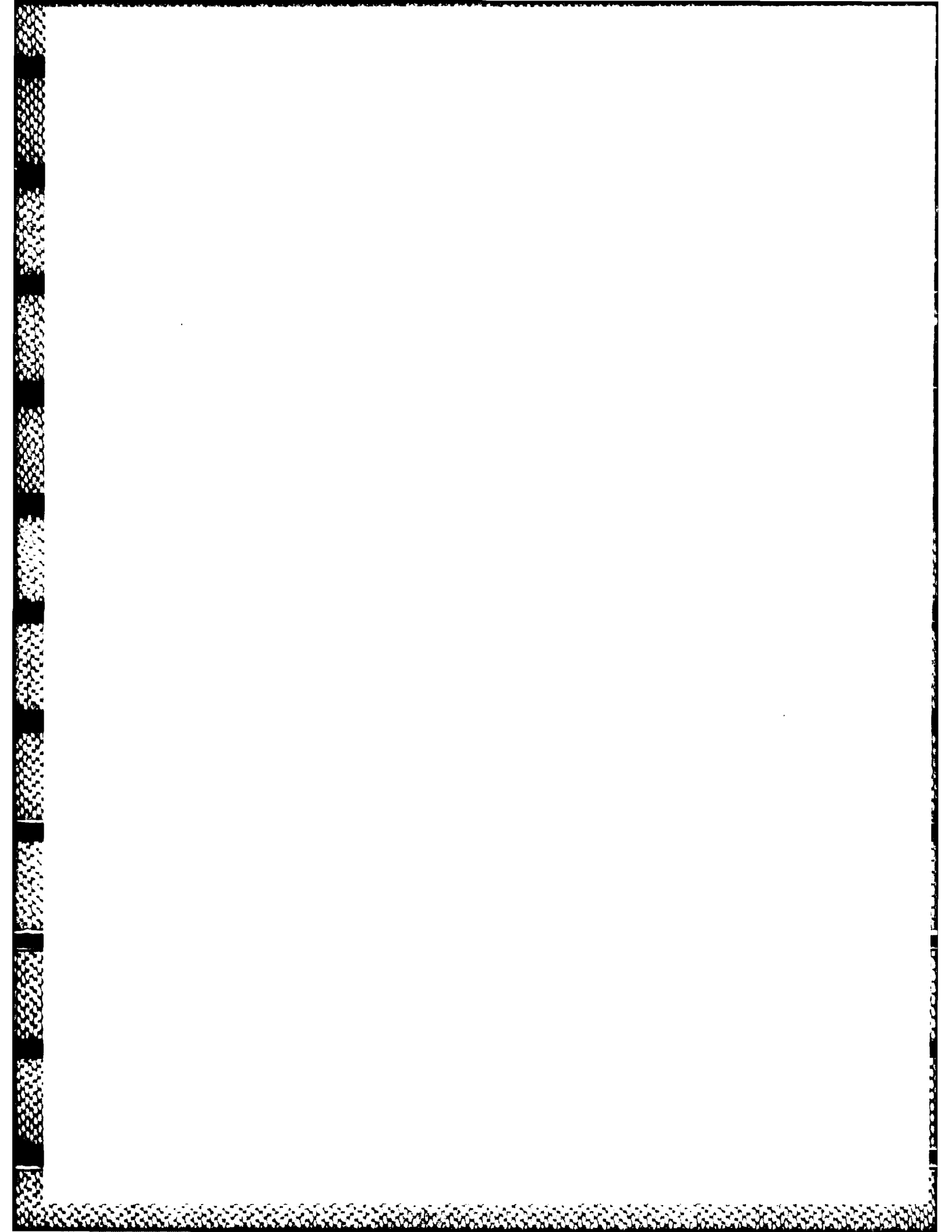
β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 289.5 K



DATA POINT: EC-6 RUN: 135 MP: 9

β : 24.4° MH: .7753 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 288.5 K





6. Propeller Rotational Harmonic Noise- and Overall Noise Levels

From all spectra of averaged time-histories the harmonic pressure levels are determined under the presupposition of a 10 dB signal-to-noise ratio, and are submitted to the A-weighting function. Both linear and A-weighted harmonic levels as well as the respective overall pressure levels (calculated from the energy sum of harmonic levels) are listed in the following tables.

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
GC-1 / 142			GC-2 / 143			GC-3 / 144				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	97.4	71.2	80.0	104.9	82.4	90.0	110.4	91.3	
2	140.0	89.6	73.5	160.0	102.1	88.7	180.0	105.4	94.5	
3	210.0	86.5	75.6	240.0	97.7	89.1	270.0	107.3	98.7	
4	280.0	79.2	70.6	320.0	94.3	87.7	360.0	102.2	97.4	
5	350.0	76.2	69.6	400.0	90.9	86.1	450.0	98.8	95.6	
6	420.0	67.3	62.5	480.0	71.4	68.2	540.0	92.6	89.4	
7	490.0	66.4	63.2	560.0	80.6	77.4	630.0	97.0	95.1	
8	560.0	63.5	60.3	640.0	77.1	75.2	720.0	97.1	96.3	
9	630.0	0.0	0.0	720.0	72.1	71.3	810.0	82.3	81.5	
10	700.0	0.0	0.0	800.0	72.5	71.7	900.0	90.7	90.7	
11	770.0	0.0	0.0	880.0	60.5	59.7	990.0	86.1	86.1	
12	840.0	0.0	0.0	960.0	65.5	65.5	1080.0	82.6	82.6	
13	910.0	0.0	0.0	1040.0	63.7	63.7	1170.0	79.5	80.1	
14	980.0	0.0	0.0	1120.0	62.1	62.1	1260.0	76.5	77.1	
15	1050.0	0.0	0.0	1200.0	54.3	54.9	1350.0	74.2	74.8	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	75.3	76.3	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	76.6	77.6	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	68.3	69.3	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		98.5	79.9			107.6	94.6			113.7 105.0

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
GC-1 / 142				GC-2 / 143			GC-3 / 144			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	102.2	76.0	80.0	104.9	82.4	90.0	112.9	93.8	
2	140.0	99.5	83.4	160.0	108.0	94.6	180.0	118.5	107.6	
3	210.0	95.2	84.3	240.0	104.0	95.4	270.0	106.4	97.8	
4	280.0	90.3	81.7	320.0	100.8	94.2	360.0	111.8	107.0	
5	350.0	84.6	78.0	400.0	97.7	92.9	450.0	109.6	106.4	
6	420.0	80.3	75.5	480.0	98.0	94.8	540.0	109.1	105.9	
7	490.0	76.5	73.3	560.0	94.6	91.4	630.0	107.3	105.4	
8	560.0	71.2	68.0	640.0	88.8	86.9	720.0	100.9	100.1	
9	630.0	66.4	64.5	720.0	84.0	83.2	810.0	103.7	102.9	
10	700.0	59.9	58.0	800.0	83.6	82.8	900.0	103.1	103.1	
11	770.0	43.3	42.5	880.0	82.7	81.9	990.0	99.6	99.6	
12	840.0	0.0	0.0	960.0	77.4	77.4	1080.0	95.6	95.6	
13	910.0	0.0	0.0	1040.0	73.0	73.0	1170.0	97.3	97.9	
14	980.0	0.0	0.0	1120.0	62.9	62.9	1260.0	93.6	94.2	
15	1050.0	0.0	0.0	1200.0	65.7	66.3	1350.0	95.0	95.6	
16	1120.0	0.0	0.0	1280.0	60.2	60.8	1440.0	87.5	88.5	
17	1190.0	0.0	0.0	1360.0	58.4	59.0	1530.0	85.4	86.4	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	87.1	83.1	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	79.3	80.3	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	81.9	83.1	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	72.6	73.8	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		104.8	89.1	111.7 102.2			121.5 114.9			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
GC-1 / 142				GC-2 / 143				GC-3 / 144			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	103.8	77.6	80.0	107.0	84.5	90.0	113.3	94.2		
2	140.0	101.1	85.0	160.0	108.4	95.0	180.0	112.8	101.9		
3	210.0	96.4	85.5	240.0	106.1	97.5	270.0	112.4	103.8		
4	280.0	93.7	85.1	320.0	103.7	97.1	360.0	113.3	108.5		
5	350.0	90.2	83.6	400.0	103.3	98.5	450.0	113.4	110.2		
6	420.0	87.4	82.6	480.0	101.5	98.3	540.0	109.9	106.7		
7	490.0	81.8	78.6	560.0	96.0	92.8	630.0	111.2	109.3		
8	560.0	75.0	71.8	640.0	95.9	94.0	720.0	111.1	110.3		
9	630.0	73.6	71.7	720.0	92.7	91.9	810.0	109.3	108.5		
10	700.0	69.2	67.3	800.0	91.3	90.5	900.0	108.2	108.2		
11	770.0	62.9	62.1	880.0	87.8	87.0	990.0	106.6	106.6		
12	840.0	63.2	62.4	960.0	85.8	85.8	1080.0	105.8	105.8		
13	910.0	0.0	0.0	1040.0	82.2	82.2	1170.0	100.3	100.9		
14	980.0	0.0	0.0	1120.0	78.7	78.7	1260.0	103.2	103.8		
15	1050.0	0.0	0.0	1200.0	73.7	74.3	1350.0	100.5	101.1		
16	1120.0	0.0	0.0	1280.0	74.3	74.9	1440.0	99.3	100.3		
17	1190.0	0.0	0.0	1360.0	68.2	68.8	1530.0	95.5	96.5		
18	1260.0	0.0	0.0	1440.0	63.4	64.4	1620.0	97.7	98.7		
19	1330.0	0.0	0.0	1520.0	56.2	57.2	1710.0	94.3	95.3		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	90.0	91.2		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	90.4	91.6		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	88.3	89.5		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	85.3	86.5		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	80.2	81.4		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	83.1	84.4		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	75.4	76.7		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	71.3	72.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	74.2	75.5		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	71.4	72.7		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	69.5	70.8		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	67.6	68.9		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	68.5	69.7		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	62.4	63.6		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		106.6	92.0			113.6	105.6			122.2	118.8

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
GC-1 / 142				GC-2 / 143				GC-3 / 144		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	105.0	78.8	80.0	110.4	87.9	90.0	113.3	94.2	
2	140.0	102.0	85.9	160.0	107.9	94.5	180.0	112.4	101.5	
3	210.0	96.7	85.8	240.0	107.9	99.3	270.0	115.0	106.4	
4	280.0	96.1	87.5	320.0	106.5	99.9	360.0	113.8	109.0	
5	350.0	91.4	84.8	400.0	103.9	99.1	450.0	113.6	110.4	
6	420.0	86.6	81.8	480.0	101.8	98.6	540.0	113.2	110.0	
7	490.0	82.9	79.7	560.0	100.9	97.7	630.0	112.6	110.7	
8	560.0	79.9	76.7	640.0	98.7	96.8	720.0	111.8	111.0	
9	630.0	76.4	74.5	720.0	94.3	93.5	810.0	111.1	110.3	
10	700.0	70.8	68.9	800.0	93.6	92.8	900.0	109.9	109.9	
11	770.0	62.7	61.9	880.0	91.8	91.0	990.0	109.4	109.4	
12	840.0	0.0	0.0	960.0	87.0	87.0	1080.0	108.7	108.7	
13	910.0	0.0	0.0	1040.0	86.5	86.5	1170.0	108.0	108.6	
14	980.0	0.0	0.0	1120.0	84.1	84.1	1260.0	103.4	104.0	
15	1050.0	0.0	0.0	1200.0	80.8	81.4	1350.0	105.3	105.9	
16	1120.0	0.0	0.0	1280.0	74.7	75.3	1440.0	103.9	104.9	
17	1190.0	0.0	0.0	1360.0	77.0	77.6	1530.0	99.8	100.8	
18	1260.0	0.0	0.0	1440.0	73.1	74.1	1620.0	100.2	101.2	
19	1330.0	0.0	0.0	1520.0	66.0	67.0	1710.0	98.7	99.7	
20	1400.0	0.0	0.0	1600.0	58.5	59.5	1800.0	96.5	97.7	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	93.7	94.9	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	92.0	93.2	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	90.1	91.3	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	87.6	88.8	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	84.9	86.2	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	83.5	84.8	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	82.9	84.2	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	78.0	79.3	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	78.7	80.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	77.2	78.5	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	74.6	75.9	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	76.1	77.3	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	72.8	74.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	70.9	72.1	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	74.9	76.1	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	71.4	72.6	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	70.5	71.7	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	71.9	73.1	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		107.6	93.1	115.4		107.4	123.6		120.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
GC-1 / 142				GC-2 / 143				GC-3 / 144			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	105.6	79.4	80.0	113.6	91.1	90.0	113.1	94.0		
2	140.0	103.0	86.9	160.0	109.0	95.6	180.0	109.7	98.8		
3	210.0	95.1	84.2	240.0	106.2	97.6	270.0	116.0	107.4		
4	280.0	94.8	86.2	320.0	109.7	103.1	360.0	117.8	113.0		
5	350.0	92.8	86.2	400.0	105.9	101.1	450.0	109.5	106.3		
6	420.0	87.1	82.3	480.0	99.6	96.4	540.0	114.0	110.8		
7	490.0	81.6	78.4	560.0	102.4	99.2	630.0	114.4	112.5		
8	560.0	80.6	77.4	640.0	100.6	98.7	720.0	110.9	110.1		
9	630.0	78.0	76.1	720.0	96.9	96.1	810.0	110.9	110.1		
10	700.0	74.9	73.0	800.0	93.2	92.4	900.0	109.3	109.3		
11	770.0	67.5	66.7	880.0	91.4	90.6	990.0	110.3	110.3		
12	840.0	64.6	63.8	960.0	91.6	91.6	1080.0	108.0	108.0		
13	910.0	0.0	0.0	1040.0	88.7	88.7	1170.0	106.9	107.5		
14	980.0	0.0	0.0	1120.0	84.0	84.0	1260.0	107.9	108.5		
15	1050.0	0.0	0.0	1200.0	81.7	82.3	1350.0	104.5	105.1		
16	1120.0	0.0	0.0	1280.0	81.7	82.3	1440.0	103.5	104.5		
17	1190.0	0.0	0.0	1360.0	74.2	74.8	1530.0	102.5	103.5		
18	1260.0	0.0	0.0	1440.0	73.2	74.2	1620.0	98.8	99.8		
19	1330.0	0.0	0.0	1520.0	71.3	72.3	1710.0	98.5	99.5		
20	1400.0	0.0	0.0	1600.0	64.6	65.6	1800.0	98.2	99.4		
21	1470.0	0.0	0.0	1680.0	60.5	61.5	1890.0	93.8	95.0		
22	1540.0	0.0	0.0	1760.0	60.7	61.7	1980.0	94.3	95.5		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	92.5	93.7		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	88.8	90.0		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	88.4	89.7		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	86.1	87.4		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	83.1	84.4		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	82.7	84.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	77.3	78.6		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	80.5	81.8		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	78.7	80.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	74.9	76.1		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	76.9	78.1		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	77.9	79.1		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	69.6	70.8		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		108.1	93.1	117.3		108.7	124.2		121.2		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
GC-1 / 142				GC-2 / 143				GC-3 / 144			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	104.9	78.7	80.0	115.8	93.3	90.0	110.2	91.1		
2	140.0	101.7	85.6	160.0	108.7	95.3	180.0	110.6	99.7		
3	210.0	93.5	82.6	240.0	107.2	98.6	270.0	113.1	104.5		
4	280.0	93.4	84.8	320.0	109.2	102.6	360.0	113.2	108.4		
5	350.0	91.9	85.3	400.0	103.1	98.3	450.0	107.0	103.8		
6	420.0	80.6	75.8	480.0	98.4	95.2	540.0	112.3	109.1		
7	490.0	79.3	76.1	560.0	101.0	97.8	630.0	109.7	107.8		
8	560.0	78.2	75.0	640.0	96.2	94.3	720.0	104.8	104.0		
9	630.0	72.9	71.0	720.0	86.2	85.4	810.0	109.1	108.3		
10	700.0	66.1	64.2	800.0	93.1	92.3	900.0	104.8	104.8		
11	770.0	62.2	61.4	880.0	89.2	88.4	990.0	102.0	102.0		
12	840.0	0.0	0.0	960.0	81.2	81.2	1080.0	104.4	104.4		
13	910.0	0.0	0.0	1040.0	80.6	80.6	1170.0	101.0	101.6		
14	980.0	0.0	0.0	1120.0	81.8	81.8	1260.0	98.9	99.5		
15	1050.0	0.0	0.0	1200.0	71.5	72.1	1350.0	100.1	100.7		
16	1120.0	0.0	0.0	1280.0	70.8	71.4	1440.0	96.5	97.5		
17	1190.0	0.0	0.0	1360.0	70.4	71.0	1530.0	92.8	93.8		
18	1260.0	0.0	0.0	1440.0	60.6	61.6	1620.0	91.6	92.6		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	92.6	93.6		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	83.6	84.8		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	86.6	87.8		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	85.2	86.4		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	79.2	80.4		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	81.1	82.3		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	78.4	79.7		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	72.6	73.9		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	73.2	74.5		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	73.4	74.7		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	62.6	63.9		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		107.2	91.4			118.0	107.3			120.7	116.9

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
GC-1 / 142				GC-2 / 143			GC-3 / 144			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	100.9	74.7	80.0	112.6	90.1	90.0	108.5	89.4	
2	140.0	92.7	76.6	160.0	104.5	91.1	180.0	0.0	0.0	
3	210.0	89.6	78.7	240.0	102.1	93.5	270.0	0.0	0.0	
4	280.0	79.0	70.4	320.0	95.6	89.0	360.0	0.0	0.0	
5	350.0	76.2	69.6	400.0	90.5	85.7	450.0	0.0	0.0	
6	420.0	65.8	61.0	480.0	83.1	79.9	540.0	0.0	0.0	
7	490.0	63.2	60.0	560.0	81.3	78.1	630.0	0.0	0.0	
8	560.0	60.8	57.6	640.0	80.8	78.9	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	66.0	65.2	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	64.1	63.3	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		101.8	82.4	113.6		97.8	108.5		89.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
GC-1 / 142				GC-2 / 143				GC-3 / 144		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	103.8	77.6	80.0	107.5	85.0	90.0	108.3	89.2	
2	140.0	103.2	87.1	160.0	107.4	94.0	180.0	111.7	100.8	
3	210.0	99.0	88.1	240.0	107.5	98.9	270.0	112.0	103.4	
4	280.0	94.6	86.0	320.0	104.4	97.8	360.0	111.9	107.1	
5	350.0	90.1	83.5	400.0	103.1	98.3	450.0	111.5	108.3	
6	420.0	87.9	83.1	480.0	101.2	98.0	540.0	111.7	108.5	
7	490.0	82.2	79.0	560.0	99.3	96.1	630.0	111.2	109.3	
8	560.0	80.2	77.0	640.0	95.9	94.0	720.0	110.8	110.0	
9	630.0	75.4	73.5	720.0	95.2	94.4	810.0	110.5	109.7	
10	700.0	72.1	70.2	800.0	93.9	93.1	900.0	109.1	109.1	
11	770.0	69.9	69.1	880.0	89.0	88.2	990.0	108.3	108.3	
12	840.0	0.0	0.0	960.0	87.8	87.8	1080.0	106.7	106.7	
13	910.0	0.0	0.0	1040.0	84.7	84.7	1170.0	105.5	106.1	
14	980.0	0.0	0.0	1120.0	82.3	82.3	1260.0	104.0	104.6	
15	1050.0	0.0	0.0	1200.0	79.8	80.4	1350.0	102.6	103.2	
16	1120.0	0.0	0.0	1280.0	77.3	77.9	1440.0	100.7	101.7	
17	1190.0	0.0	0.0	1360.0	76.0	76.6	1530.0	99.2	100.2	
18	1260.0	0.0	0.0	1440.0	70.7	71.7	1620.0	97.7	98.7	
19	1330.0	0.0	0.0	1520.0	65.2	66.2	1710.0	96.0	97.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	93.8	95.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	93.5	94.7	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	89.4	90.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	89.4	90.6	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	87.0	88.2	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	83.9	85.2	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	83.6	84.9	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	80.5	81.8	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	78.4	79.7	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	78.5	79.8	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	77.4	78.7	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	75.9	77.2	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	77.4	78.6	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	75.6	76.8	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	75.0	76.2	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	75.6	76.8	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	73.2	74.4	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	73.7	74.9	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	73.1	74.3	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	69.9	71.1	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	70.2	71.2	
OASPL		107.6	93.5	114.0		106.3	121.8		119.2	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
GC-1 / 142				GC-2 / 143				GC-3 / 144			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	100.3	74.1	80.0	110.2	87.7	90.0	107.1	88.0		
2	140.0	100.4	84.3	160.0	104.9	91.5	180.0	109.1	98.2		
3	210.0	91.8	80.9	240.0	103.4	94.8	270.0	115.3	106.7		
4	280.0	95.6	87.0	320.0	106.7	100.1	360.0	113.4	108.6		
5	350.0	89.6	83.0	400.0	100.2	95.4	450.0	113.0	109.8		
6	420.0	83.9	79.1	480.0	101.0	97.8	540.0	113.1	109.9		
7	490.0	82.3	79.1	560.0	99.9	96.7	630.0	111.9	110.0		
8	560.0	79.2	76.0	640.0	97.3	95.4	720.0	111.2	110.4		
9	630.0	76.4	74.5	720.0	94.6	93.8	810.0	111.8	111.0		
10	700.0	69.1	67.2	800.0	93.6	92.8	900.0	108.3	108.3		
11	770.0	0.0	0.0	880.0	90.3	89.5	990.0	107.0	107.0		
12	840.0	0.0	0.0	960.0	85.4	85.4	1080.0	108.8	108.8		
13	910.0	0.0	0.0	1040.0	87.5	87.5	1170.0	107.8	108.4		
14	980.0	0.0	0.0	1120.0	81.6	81.6	1260.0	104.8	105.4		
15	1050.0	0.0	0.0	1200.0	81.1	81.7	1350.0	105.4	106.0		
16	1120.0	0.0	0.0	1280.0	77.0	77.6	1440.0	103.7	104.7		
17	1190.0	0.0	0.0	1360.0	76.6	77.2	1530.0	101.5	102.5		
18	1260.0	0.0	0.0	1440.0	73.1	74.1	1620.0	99.7	100.7		
19	1330.0	0.0	0.0	1520.0	70.4	71.4	1710.0	97.9	98.9		
20	1400.0	0.0	0.0	1600.0	70.3	71.3	1800.0	96.2	97.4		
21	1470.0	0.0	0.0	1680.0	63.2	64.2	1890.0	94.5	95.7		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	89.7	90.9		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	90.5	91.7		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	89.9	91.1		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	83.2	84.5		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	84.5	85.8		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	83.0	84.3		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	80.8	82.1		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	80.2	81.5		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	77.6	78.9		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	76.6	77.9		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	79.3	80.5		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	76.7	77.9		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	75.9	77.1		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	78.4	79.6		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	78.6	79.8		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	74.1	75.3		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	74.9	76.1		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	74.0	75.2		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	69.6	70.6		
OASPL		104.5	91.3			114.0	106.0			122.8	120.3

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
GC-4 / 145				GC-5 / 146				GC-6 / 147			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	94.6	68.4	70.0	101.4	75.2	80.0	106.8	84.3		
2	120.0	83.8	67.7	140.0	91.6	75.5	160.0	101.6	88.2		
3	180.0	76.9	66.0	210.0	88.2	77.3	240.0	98.0	89.4		
4	240.0	69.8	61.2	280.0	81.6	73.0	320.0	94.0	87.4		
5	300.0	70.6	64.0	350.0	76.0	69.4	400.0	90.8	86.0		
6	360.0	67.3	62.5	420.0	67.8	63.0	480.0	79.1	75.9		
7	420.0	61.7	56.9	490.0	68.2	65.0	560.0	67.0	63.8		
8	480.0	59.0	55.8	560.0	68.5	65.3	640.0	0.0	0.0		
9	540.0	0.0	0.0	630.0	56.9	55.0	720.0	0.0	0.0		
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		95.1	73.7			102.1	82.0			108.6	94.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
GC-4 / 145				GC-5 / 146			GC-6 / 147				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	97.3	71.1	70.0	105.5	79.3	80.0	105.7	83.2		
2	120.0	93.7	77.6	140.0	104.1	88.0	160.0	108.1	94.7		
3	180.0	89.5	78.6	210.0	98.4	87.5	240.0	103.9	95.3		
4	240.0	81.6	73.0	280.0	94.0	85.4	320.0	101.4	94.8		
5	300.0	70.1	63.5	350.0	89.1	82.5	400.0	98.0	93.2		
6	360.0	73.1	68.3	420.0	84.5	79.7	480.0	97.5	94.3		
7	420.0	61.1	56.3	490.0	77.4	74.2	560.0	93.8	90.6		
8	480.0	0.0	0.0	560.0	73.8	70.6	640.0	90.0	88.1		
9	540.0	0.0	0.0	630.0	70.3	68.4	720.0	84.4	83.6		
10	600.0	0.0	0.0	700.0	60.7	58.8	800.0	80.3	79.5		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	81.5	80.7		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	71.7	71.7		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	66.6	66.6		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		99.4	82.4			108.5	92.9			111.9	102.2

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
GC-4 / 145				GC-5 / 146				GC-6 / 147			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	99.3	73.1	70.0	107.3	81.1	80.0	107.0	84.5		
2	120.0	96.1	80.0	140.0	105.7	89.6	160.0	108.2	94.8		
3	180.0	89.9	79.0	210.0	99.8	88.9	240.0	106.0	97.4		
4	240.0	83.9	75.3	280.0	96.6	88.0	320.0	103.6	97.0		
5	300.0	78.5	71.9	350.0	93.1	86.5	400.0	103.8	99.0		
6	360.0	74.0	69.2	420.0	89.5	84.7	480.0	101.5	98.3		
7	420.0	69.6	64.8	490.0	84.0	80.8	560.0	96.8	93.6		
8	480.0	60.0	56.8	560.0	79.4	76.2	640.0	95.5	93.6		
9	540.0	0.0	0.0	630.0	75.4	73.5	720.0	93.9	93.1		
10	600.0	0.0	0.0	700.0	64.4	62.5	800.0	91.9	91.1		
11	660.0	0.0	0.0	770.0	66.5	65.7	880.0	86.6	85.8		
12	720.0	0.0	0.0	840.0	63.2	62.4	960.0	86.6	86.6		
13	780.0	0.0	0.0	910.0	50.2	50.2	1040.0	81.9	81.9		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	79.6	79.6		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	74.2	74.8		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	74.4	75.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	68.4	69.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	62.5	63.5		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		101.4	84.2			110.3	95.3			113.6	105.8

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
GC-4 / 145				GC-5 / 146				GC-6 / 147		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	101.4	75.2	70.0	108.5	82.3	80.0	109.3	86.8	
2	120.0	97.4	81.3	140.0	106.3	90.2	160.0	107.3	93.9	
3	180.0	90.4	79.5	210.0	100.1	89.2	240.0	108.1	99.5	
4	240.0	85.1	76.5	280.0	98.8	90.2	320.0	106.8	100.2	
5	300.0	80.1	73.5	350.0	93.4	86.8	400.0	103.9	99.1	
6	360.0	68.3	63.5	420.0	90.0	85.2	480.0	102.2	99.0	
7	420.0	67.6	62.8	490.0	86.0	82.8	560.0	101.3	98.1	
8	480.0	0.0	0.0	560.0	81.8	78.6	640.0	99.2	97.3	
9	540.0	0.0	0.0	630.0	80.1	78.2	720.0	94.0	93.2	
10	600.0	0.0	0.0	700.0	73.9	72.0	800.0	94.0	93.2	
11	660.0	0.0	0.0	770.0	67.9	67.1	880.0	92.3	91.5	
12	720.0	0.0	0.0	840.0	67.1	66.3	960.0	87.2	87.2	
13	780.0	0.0	0.0	910.0	60.8	60.8	1040.0	86.8	86.8	
14	840.0	0.0	0.0	980.0	58.9	58.9	1120.0	84.6	84.6	
15	900.0	0.0	0.0	1050.0	48.5	48.5	1200.0	80.3	80.9	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	73.4	74.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	76.6	77.2	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	70.5	71.5	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	66.5	67.5	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	59.4	60.4	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		103.2	85.1			111.3	96.3			115.1 107.6

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
GC-4 / 145				GC-5 / 146				GC-6 / 147		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	102.6	76.4	70.0	109.7	83.5	80.0	112.5	90.0	
2	120.0	98.5	82.4	140.0	107.1	91.0	160.0	108.6	95.2	
3	180.0	89.0	78.1	210.0	98.0	87.1	240.0	106.8	98.2	
4	240.0	80.6	72.0	280.0	99.0	90.4	320.0	110.2	103.6	
5	300.0	81.3	74.7	350.0	98.0	91.4	400.0	105.5	100.7	
6	360.0	79.5	74.7	420.0	91.1	86.3	480.0	99.7	96.5	
7	420.0	68.7	63.9	490.0	83.6	80.4	560.0	102.5	99.3	
8	480.0	63.1	59.9	560.0	85.3	82.1	640.0	100.4	98.5	
9	540.0	0.0	0.0	630.0	81.4	79.5	720.0	97.2	96.4	
10	600.0	0.0	0.0	700.0	73.2	71.3	800.0	93.7	92.9	
11	660.0	0.0	0.0	770.0	72.1	71.3	880.0	91.0	90.2	
12	720.0	0.0	0.0	840.0	66.6	65.8	960.0	91.2	91.2	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	88.6	88.6	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	83.5	83.5	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	82.8	83.4	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	82.3	82.9	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	74.8	75.4	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	72.4	73.4	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	70.8	71.8	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	71.1	72.1	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	67.9	68.9	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	64.8	65.8	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		104.2	85.6		112.2	97.2		116.9	108.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
GC-4 / 145				GC-5 / 146				GC-6 / 147			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	102.6	76.4	70.0	110.2	84.0	80.0	115.3	92.8		
2	120.0	97.1	81.0	140.0	106.6	90.5	160.0	109.0	95.6		
3	180.0	89.4	78.5	210.0	99.0	88.1	240.0	106.7	98.1		
4	240.0	80.3	71.7	280.0	99.0	90.4	320.0	109.0	102.4		
5	300.0	78.2	71.6	350.0	95.5	88.9	400.0	101.9	97.1		
6	360.0	63.7	58.9	420.0	87.4	82.6	480.0	99.5	96.3		
7	420.0	0.0	0.0	490.0	83.0	79.8	560.0	101.0	97.8		
8	480.0	0.0	0.0	560.0	82.4	79.2	640.0	95.9	94.0		
9	540.0	0.0	0.0	630.0	77.9	76.0	720.0	88.5	87.7		
10	600.0	0.0	0.0	700.0	66.0	64.1	800.0	92.9	92.1		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	88.9	88.1		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	80.5	80.5		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	81.4	81.4		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	80.9	80.9		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	73.2	73.8		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		103.9	84.3			112.3	96.3			117.7	107.0

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
GC-4 / 145				GC-5 / 146				GC-6 / 147			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	94.7	68.5	70.0	109.8	83.6	80.0	113.9	91.4		
2	120.0	88.2	72.1	140.0	101.0	84.9	160.0	101.2	87.8		
3	180.0	76.8	65.9	210.0	94.0	83.1	240.0	99.4	90.8		
4	240.0	69.7	61.1	280.0	87.0	78.4	320.0	93.5	86.9		
5	300.0	0.0	0.0	350.0	75.4	68.8	400.0	86.5	81.7		
6	360.0	0.0	0.0	420.0	78.8	74.0	480.0	86.3	83.1		
7	420.0	0.0	0.0	490.0	68.7	65.5	560.0	81.2	78.0		
8	480.0	0.0	0.0	560.0	0.0	0.0	640.0	83.6	81.7		
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	71.2	70.4		
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL				95.6	74.5	110.4		89.3	114.3		96.3

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
GC-4 / 145			GC-5 / 146			GC-6 / 147				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	101.4	75.2	70.0	106.7	80.5	80.0	109.4	86.9	
2	120.0	94.4	78.3	140.0	105.0	88.9	160.0	108.4	95.0	
3	180.0	88.4	77.5	210.0	100.8	89.9	240.0	108.5	99.9	
4	240.0	82.2	73.6	280.0	95.9	87.3	320.0	104.9	98.3	
5	300.0	76.7	70.1	350.0	90.8	84.2	400.0	104.1	99.3	
6	360.0	73.8	69.0	420.0	89.6	84.8	480.0	101.9	98.7	
7	420.0	0.0	0.0	490.0	86.1	82.9	560.0	99.1	95.9	
8	480.0	0.0	0.0	560.0	79.5	76.3	640.0	95.8	93.9	
9	540.0	0.0	0.0	630.0	75.2	73.3	720.0	95.3	94.5	
10	600.0	0.0	0.0	700.0	73.0	71.1	800.0	93.4	92.6	
11	660.0	0.0	0.0	770.0	70.4	69.6	880.0	90.9	90.1	
12	720.0	0.0	0.0	840.0	66.8	66.0	960.0	87.1	87.1	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	85.2	85.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	82.0	82.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	81.3	81.9	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	79.4	80.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	73.4	74.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	69.4	70.4	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		102.5	83.0			109.8	95.1			115.0 106.9

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
GC-4 / 145				GC-5 / 146				GC-6 / 147			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	104.7	78.5	70.0	105.7	79.5	80.0	108.9	86.4		
2	120.0	94.7	78.6	140.0	104.8	88.7	160.0	105.5	92.1		
3	180.0	90.0	79.1	210.0	95.9	85.0	240.0	103.7	95.1		
4	240.0	80.7	72.1	280.0	98.3	89.7	320.0	106.8	100.2		
5	300.0	78.3	71.7	350.0	95.2	88.6	400.0	101.2	96.4		
6	360.0	75.3	70.5	420.0	85.0	80.2	480.0	100.8	97.6		
7	420.0	63.6	58.8	490.0	83.8	80.6	560.0	99.5	96.3		
8	480.0	0.0	0.0	560.0	82.5	79.3	640.0	96.6	94.7		
9	540.0	0.0	0.0	630.0	74.4	72.5	720.0	94.7	93.9		
10	600.0	0.0	0.0	700.0	75.2	73.3	800.0	93.6	92.8		
11	660.0	0.0	0.0	770.0	69.6	68.8	880.0	90.5	89.7		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	87.5	87.5		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	86.4	86.4		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	83.1	83.1		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	82.7	83.3		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	76.7	77.3		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	74.1	74.7		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		105.3	84.3	109.2		95.0	113.7		106.0		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
LC-1 / 139				LC-2 / 140				LC-3 / 141		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	99.9	73.7	80.0	106.4	83.9	90.0	111.4	92.3	
2	140.0	91.8	75.7	160.0	104.5	91.1	180.0	107.7	96.8	
3	210.0	89.2	78.3	240.0	100.8	92.2	270.0	109.4	100.8	
4	280.0	83.1	74.5	320.0	97.0	90.4	360.0	105.8	101.0	
5	350.0	78.8	72.2	400.0	96.0	91.2	450.0	103.5	100.3	
6	420.0	66.6	61.8	480.0	86.7	83.5	540.0	97.7	94.5	
7	490.0	66.6	63.4	560.0	82.8	79.6	630.0	100.5	98.6	
8	560.0	65.6	62.4	640.0	80.9	79.0	720.0	100.6	99.8	
9	630.0	52.4	50.5	720.0	78.3	77.5	810.0	93.9	93.1	
10	700.0	0.0	0.0	800.0	79.1	78.3	900.0	95.0	95.0	
11	770.0	0.0	0.0	880.0	65.7	64.9	990.0	91.4	91.4	
12	840.0	0.0	0.0	960.0	66.0	66.0	1080.0	85.1	85.1	
13	910.0	0.0	0.0	1040.0	66.4	66.4	1170.0	82.1	82.7	
14	980.0	0.0	0.0	1120.0	61.1	61.1	1260.0	81.1	81.7	
15	1050.0	0.0	0.0	1200.0	50.8	51.4	1350.0	78.0	78.6	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	71.2	72.2	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	83.2	84.2	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	69.4	70.4	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	74.6	75.6	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	69.0	70.2	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	74.0	75.2	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	69.4	70.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	68.2	69.4	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	48.5	49.7	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		100.9	82.5		109.7	97.9		115.8	108.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
LC-1 / 139				LC-2 / 140				LC-3 / 141			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	103.6	77.4	80.0	106.1	83.6	90.0	113.5	94.4		
2	140.0	100.8	84.7	160.0	109.5	96.1	180.0	118.2	107.3		
3	210.0	96.8	85.9	240.0	105.8	97.2	270.0	110.5	101.9		
4	280.0	92.7	84.1	320.0	102.9	96.3	360.0	112.9	108.1		
5	350.0	88.6	82.0	400.0	100.2	95.4	450.0	112.6	109.4		
6	420.0	85.3	80.5	480.0	101.4	98.2	540.0	112.5	109.3		
7	490.0	81.3	78.1	560.0	97.9	94.7	630.0	110.8	108.9		
8	560.0	76.2	73.0	640.0	94.2	92.3	720.0	106.7	105.9		
9	630.0	68.7	66.8	720.0	88.1	87.3	810.0	107.8	107.0		
10	700.0	60.6	58.7	800.0	88.9	88.1	900.0	108.1	108.1		
11	770.0	0.0	0.0	880.0	88.1	87.3	990.0	105.2	105.2		
12	840.0	0.0	0.0	960.0	83.5	83.5	1080.0	102.4	102.4		
13	910.0	0.0	0.0	1040.0	79.9	79.9	1170.0	103.6	104.2		
14	980.0	0.0	0.0	1120.0	73.5	73.5	1260.0	101.1	101.7		
15	1050.0	0.0	0.0	1200.0	73.3	73.9	1350.0	100.7	101.3		
16	1120.0	0.0	0.0	1280.0	71.6	72.2	1440.0	96.6	97.6		
17	1190.0	0.0	0.0	1360.0	66.7	67.3	1530.0	95.5	96.5		
18	1260.0	0.0	0.0	1440.0	62.0	63.0	1620.0	94.3	95.3		
19	1330.0	0.0	0.0	1520.0	60.8	61.8	1710.0	90.9	91.9		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	88.9	90.1		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	85.1	86.3		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	87.1	88.3		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	82.7	83.9		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	80.4	81.6		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	77.1	78.4		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	76.4	77.7		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	71.4	72.7		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		106.3	91.3			113.5	104.9			122.9	118.2

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
LC-1 / 139				LC-2 / 140				LC-3 / 141			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	105.1	78.9	80.0	109.1	86.6	90.0	113.4	94.3		
2	140.0	102.3	86.2	160.0	109.7	96.3	180.0	113.6	102.7		
3	210.0	97.8	86.9	240.0	108.1	99.5	270.0	113.7	105.1		
4	280.0	95.1	86.5	320.0	105.3	98.7	360.0	114.9	110.1		
5	350.0	91.1	84.5	400.0	105.6	100.8	450.0	115.0	111.8		
6	420.0	88.6	83.8	480.0	103.4	100.2	540.0	112.0	108.8		
7	490.0	83.5	80.3	560.0	98.1	94.9	630.0	113.4	111.5		
8	560.0	78.5	75.3	640.0	99.2	97.3	720.0	113.5	112.7		
9	630.0	76.3	74.4	720.0	96.7	95.9	810.0	112.4	111.6		
10	700.0	71.7	69.8	800.0	94.4	93.6	900.0	111.8	111.8		
11	770.0	68.9	68.1	880.0	91.0	90.2	990.0	110.8	110.8		
12	840.0	61.9	61.1	960.0	90.4	90.4	1080.0	109.2	109.2		
13	910.0	0.0	0.0	1040.0	87.5	87.5	1170.0	105.9	106.5		
14	980.0	0.0	0.0	1120.0	83.9	83.9	1260.0	107.8	108.4		
15	1050.0	0.0	0.0	1200.0	80.3	80.9	1350.0	105.4	106.0		
16	1120.0	0.0	0.0	1280.0	81.1	81.7	1440.0	103.9	104.9		
17	1190.0	0.0	0.0	1360.0	76.1	76.7	1530.0	101.6	102.6		
18	1260.0	0.0	0.0	1440.0	72.2	73.2	1620.0	103.3	104.3		
19	1330.0	0.0	0.0	1520.0	69.3	70.3	1710.0	99.9	100.9		
20	1400.0	0.0	0.0	1600.0	66.0	67.0	1800.0	96.1	97.3		
21	1470.0	0.0	0.0	1680.0	64.6	65.6	1890.0	96.5	97.7		
22	1540.0	0.0	0.0	1760.0	58.3	59.3	1980.0	95.6	96.8		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	91.9	93.1		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	89.4	90.6		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	90.5	91.8		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	85.2	86.5		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	82.9	84.2		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	83.0	84.3		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	81.7	83.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	79.9	81.2		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	79.2	80.5		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	80.8	82.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	77.9	79.1		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	77.9	79.1		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	75.9	77.1		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	72.4	73.6		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	75.0	76.2		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	70.9	72.1		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	70.7	71.9		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	66.1	67.1		
OASPL		107.9	92.3			115.5	107.9			124.2	121.7

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
LC-1 / 139				LC-2 / 140				LC-3 / 141		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.5	80.3	80.0	112.5	90.0	90.0	113.3	94.2	
2	140.0	103.0	86.9	160.0	108.7	95.3	180.0	112.5	101.6	
3	210.0	97.7	86.8	240.0	109.5	100.9	270.0	115.8	107.2	
4	280.0	97.3	88.7	320.0	107.3	100.7	360.0	114.9	110.1	
5	350.0	92.0	85.4	400.0	105.1	100.3	450.0	114.6	111.4	
6	420.0	88.8	84.0	480.0	103.6	100.4	540.0	114.5	111.3	
7	490.0	85.1	81.9	560.0	103.0	99.8	630.0	114.8	112.9	
8	560.0	82.7	79.5	640.0	101.2	99.3	720.0	113.2	112.4	
9	630.0	79.0	77.1	720.0	97.2	96.4	810.0	112.9	112.1	
10	700.0	72.2	70.3	800.0	96.3	95.5	900.0	112.6	112.6	
11	770.0	69.8	69.0	880.0	94.6	93.8	990.0	111.6	111.6	
12	840.0	66.6	65.8	960.0	89.8	89.8	1080.0	111.1	111.1	
13	910.0	0.0	0.0	1040.0	89.3	89.3	1170.0	110.6	111.2	
14	980.0	0.0	0.0	1120.0	87.7	87.7	1260.0	106.9	107.5	
15	1050.0	0.0	0.0	1200.0	84.5	85.1	1350.0	108.2	108.8	
16	1120.0	0.0	0.0	1280.0	79.2	79.8	1440.0	107.0	108.0	
17	1190.0	0.0	0.0	1360.0	80.7	81.3	1530.0	103.7	104.7	
18	1260.0	0.0	0.0	1440.0	77.1	78.1	1620.0	103.2	104.2	
19	1330.0	0.0	0.0	1520.0	73.1	74.1	1710.0	102.6	103.6	
20	1400.0	0.0	0.0	1600.0	69.5	70.5	1800.0	100.7	101.9	
21	1470.0	0.0	0.0	1680.0	68.2	69.2	1890.0	97.6	98.8	
22	1540.0	0.0	0.0	1760.0	66.1	67.1	1980.0	96.1	97.3	
23	1610.0	0.0	0.0	1840.0	61.2	62.4	2070.0	94.4	95.6	
24	1680.0	0.0	0.0	1920.0	59.6	60.8	2160.0	92.2	93.4	
25	1750.0	0.0	0.0	2000.0	57.9	59.1	2250.0	90.6	91.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	88.2	89.5	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.3	89.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	86.4	87.7	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	86.2	87.5	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	84.9	86.2	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	82.9	84.2	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	84.1	85.3	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	81.7	82.9	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	80.5	81.7	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	82.8	84.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	80.2	81.4	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	78.2	79.4	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	79.9	81.1	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	77.7	78.9	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	77.1	78.1	
OASPL		108.9	94.4		117.0	109.1		125.0	122.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
LC-1 / 139				LC-2 / 140			LC-3 / 141			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.4	81.2	80.0	115.4	92.9	90.0	113.9	94.8	
2	140.0	103.7	87.6	160.0	109.9	96.5	180.0	111.9	101.0	
3	210.0	95.5	84.6	240.0	107.8	99.2	270.0	116.2	107.6	
4	280.0	96.2	87.6	320.0	111.2	104.6	360.0	118.2	113.4	
5	350.0	94.9	88.3	400.0	106.9	102.1	450.0	111.1	107.9	
6	420.0	88.4	83.6	480.0	100.4	97.2	540.0	114.1	110.9	
7	490.0	83.5	80.3	560.0	103.0	99.8	630.0	115.1	113.2	
8	560.0	82.9	79.7	640.0	101.7	99.8	720.0	111.2	110.4	
9	630.0	78.4	76.5	720.0	97.6	96.8	810.0	111.8	111.0	
10	700.0	71.6	69.7	800.0	94.7	93.9	900.0	109.9	109.9	
11	770.0	70.1	69.3	880.0	91.9	91.1	990.0	111.1	111.1	
12	840.0	67.7	66.9	960.0	92.4	92.4	1080.0	109.0	109.0	
13	910.0	53.1	53.1	1040.0	89.3	89.3	1170.0	108.4	109.0	
14	980.0	0.0	0.0	1120.0	85.2	85.2	1260.0	108.4	109.0	
15	1050.0	0.0	0.0	1200.0	83.5	84.1	1350.0	105.7	106.3	
16	1120.0	0.0	0.0	1280.0	83.6	84.2	1440.0	104.7	105.7	
17	1190.0	0.0	0.0	1360.0	76.7	77.3	1530.0	103.4	104.4	
18	1260.0	0.0	0.0	1440.0	74.8	75.8	1620.0	100.9	101.9	
19	1330.0	0.0	0.0	1520.0	73.8	74.8	1710.0	99.9	100.9	
20	1400.0	0.0	0.0	1600.0	68.8	69.8	1800.0	99.1	100.3	
21	1470.0	0.0	0.0	1680.0	66.0	67.0	1890.0	95.5	96.7	
22	1540.0	0.0	0.0	1760.0	64.7	65.7	1980.0	95.5	96.7	
23	1610.0	0.0	0.0	1840.0	62.1	63.3	2070.0	94.9	96.1	
24	1680.0	0.0	0.0	1920.0	58.1	59.3	2160.0	90.7	91.9	
25	1750.0	0.0	0.0	2000.0	60.9	62.1	2250.0	90.4	91.7	
26	1820.0	0.0	0.0	2080.0	52.3	53.5	2340.0	88.0	89.3	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	85.6	86.9	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	85.9	87.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	80.8	82.1	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	83.9	85.2	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	84.1	85.4	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	80.4	81.6	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	82.0	83.2	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	83.1	84.3	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	77.1	78.3	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	80.3	81.5	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	78.2	79.4	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	73.9	75.1	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	76.3	77.5	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	75.3	76.3	
OASPL		109.6	94.4		118.7	109.8		124.8	121.9	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
LC-1 / 139				LC-2 / 140				LC-3 / 141		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.2	81.0	80.0	117.0	94.5	90.0	113.3	94.2	
2	140.0	101.9	85.8	160.0	110.1	96.7	180.0	111.5	100.6	
3	210.0	93.3	82.4	240.0	108.3	99.7	270.0	113.2	104.6	
4	280.0	95.0	86.4	320.0	109.6	103.0	360.0	113.1	108.3	
5	350.0	91.4	84.8	400.0	102.7	97.9	450.0	105.2	102.0	
6	420.0	82.0	77.2	480.0	98.6	95.4	540.0	112.1	108.9	
7	490.0	79.9	76.7	560.0	101.1	97.9	630.0	109.7	107.8	
8	560.0	80.2	77.0	640.0	95.7	93.8	720.0	104.4	103.6	
9	630.0	71.7	69.8	720.0	85.1	84.3	810.0	108.3	107.5	
10	700.0	59.0	57.1	800.0	92.9	92.1	900.0	104.3	104.3	
11	770.0	0.0	0.0	880.0	88.0	87.2	990.0	99.9	99.9	
12	840.0	0.0	0.0	960.0	81.3	81.3	1080.0	103.5	103.5	
13	910.0	0.0	0.0	1040.0	80.5	80.5	1170.0	99.6	100.2	
14	980.0	0.0	0.0	1120.0	81.8	81.8	1260.0	97.7	98.3	
15	1050.0	0.0	0.0	1200.0	72.0	72.6	1350.0	98.4	99.0	
16	1120.0	0.0	0.0	1280.0	71.4	72.0	1440.0	94.8	95.8	
17	1190.0	0.0	0.0	1360.0	70.6	71.2	1530.0	92.4	93.4	
18	1260.0	0.0	0.0	1440.0	61.4	62.4	1620.0	88.2	89.2	
19	1330.0	0.0	0.0	1520.0	61.1	62.1	1710.0	92.9	93.9	
20	1400.0	0.0	0.0	1600.0	51.2	52.2	1800.0	77.0	78.2	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	84.9	86.1	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	83.9	85.1	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	71.6	72.8	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		108.7	92.0	119.1	107.6	120.9	116.4			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
LC-1 / 139				LC-2 / 140				LC-3 / 141			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	103.9	77.7	80.0	113.4	90.9	90.0	112.8	93.7		
2	140.0	94.5	78.4	160.0	104.2	90.8	180.0	111.3	100.4		
3	210.0	88.4	77.5	240.0	102.1	93.5	270.0	95.7	87.1		
4	280.0	73.2	64.6	320.0	96.0	89.4	360.0	0.0	0.0		
5	350.0	74.3	67.7	400.0	84.8	80.0	450.0	0.0	0.0		
6	420.0	72.8	68.0	480.0	77.2	74.0	540.0	0.0	0.0		
7	490.0	64.5	61.3	560.0	85.7	82.5	630.0	0.0	0.0		
8	560.0	0.0	0.0	640.0	83.0	81.1	720.0	0.0	0.0		
9	630.0	0.0	0.0	720.0	71.5	70.7	810.0	0.0	0.0		
10	700.0	0.0	0.0	800.0	62.3	61.5	900.0	0.0	0.0		
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0		
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0		
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0		
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0		
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0		
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0		
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0		
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		104.5	83.1			114.2	97.8			115.2	101.4

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
LC-1 / 139				LC-2 / 140			LC-3 / 141			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.2	78.0	80.0	110.2	87.7	90.0	110.1	91.0	
2	140.0	103.8	87.7	160.0	109.7	96.3	180.0	113.5	102.6	
3	210.0	100.2	89.3	240.0	109.3	100.7	270.0	113.9	105.3	
4	280.0	95.4	86.8	320.0	106.1	99.5	360.0	114.3	109.5	
5	350.0	90.9	84.3	400.0	105.4	100.6	450.0	114.3	111.1	
6	420.0	89.5	84.7	480.0	103.6	100.4	540.0	114.4	111.2	
7	490.0	86.4	83.2	560.0	101.6	98.4	630.0	113.9	112.0	
8	560.0	81.0	77.8	640.0	98.5	96.6	720.0	113.8	113.0	
9	630.0	76.9	75.0	720.0	98.3	97.5	810.0	113.6	112.8	
10	700.0	74.3	72.4	800.0	96.0	95.2	900.0	112.1	112.1	
11	770.0	72.6	71.8	880.0	93.1	92.3	990.0	111.7	111.7	
12	840.0	67.7	66.9	960.0	90.4	90.4	1080.0	110.4	110.4	
13	910.0	0.0	0.0	1040.0	88.4	88.4	1170.0	109.3	109.9	
14	980.0	0.0	0.0	1120.0	85.9	85.9	1260.0	108.4	109.0	
15	1050.0	0.0	0.0	1200.0	82.9	83.5	1350.0	107.0	107.6	
16	1120.0	0.0	0.0	1280.0	81.7	82.3	1440.0	105.3	106.3	
17	1190.0	0.0	0.0	1360.0	79.2	79.8	1530.0	104.1	105.1	
18	1260.0	0.0	0.0	1440.0	75.7	76.7	1620.0	102.7	103.7	
19	1330.0	0.0	0.0	1520.0	72.8	73.8	1710.0	100.9	101.9	
20	1400.0	0.0	0.0	1600.0	68.6	69.6	1800.0	99.4	100.6	
21	1470.0	0.0	0.0	1680.0	68.6	69.6	1890.0	98.7	99.9	
22	1540.0	0.0	0.0	1760.0	64.3	65.3	1980.0	95.8	97.0	
23	1610.0	0.0	0.0	1840.0	62.1	63.3	2070.0	95.2	96.4	
24	1680.0	0.0	0.0	1920.0	59.1	60.3	2160.0	93.3	94.5	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	90.6	91.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	90.1	91.4	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.0	89.3	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	85.9	87.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	86.0	87.3	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	84.9	86.2	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	84.1	85.4	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	84.7	85.9	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	82.2	83.4	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	82.8	84.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	81.9	83.1	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	80.2	81.4	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	80.2	81.4	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	79.1	80.3	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	76.6	77.8	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	75.5	76.5	
OASPL		108.3	94.6	116.2			108.6	124.6		122.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
LC-1 / 139				LC-2 / 140			LC-3 / 141			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	101.8	75.6	80.0	111.8	89.3	90.0	109.9	90.8	
2	140.0	100.8	84.7	160.0	106.9	93.5	180.0	108.8	97.9	
3	210.0	92.8	81.9	240.0	105.2	96.6	270.0	115.9	107.3	
4	280.0	97.0	88.4	320.0	108.0	101.4	360.0	113.7	108.9	
5	350.0	92.6	86.0	400.0	102.4	97.6	450.0	113.2	110.0	
6	420.0	84.1	79.3	480.0	101.6	98.4	540.0	113.8	110.6	
7	490.0	83.8	80.6	560.0	102.2	99.0	630.0	113.1	111.2	
8	560.0	80.5	77.3	640.0	98.1	96.2	720.0	111.9	111.1	
9	630.0	77.1	75.2	720.0	95.6	94.8	810.0	113.4	112.6	
10	700.0	71.2	69.3	800.0	95.8	95.0	900.0	110.0	110.0	
11	770.0	0.0	0.0	880.0	92.9	92.1	990.0	108.9	108.9	
12	840.0	0.0	0.0	960.0	87.9	87.9	1080.0	110.5	110.5	
13	910.0	0.0	0.0	1040.0	89.9	89.9	1170.0	109.2	109.8	
14	980.0	0.0	0.0	1120.0	83.8	83.8	1260.0	106.1	106.7	
15	1050.0	0.0	0.0	1200.0	84.4	85.0	1350.0	107.4	108.0	
16	1120.0	0.0	0.0	1280.0	79.1	79.7	1440.0	105.7	106.7	
17	1190.0	0.0	0.0	1360.0	78.8	79.4	1530.0	103.1	104.1	
18	1260.0	0.0	0.0	1440.0	77.7	78.7	1620.0	102.3	103.3	
19	1330.0	0.0	0.0	1520.0	73.8	74.8	1710.0	100.6	101.6	
20	1400.0	0.0	0.0	1600.0	69.8	70.8	1800.0	99.3	100.5	
21	1470.0	0.0	0.0	1680.0	68.4	69.4	1890.0	98.1	99.3	
22	1540.0	0.0	0.0	1760.0	68.3	69.3	1980.0	93.1	94.3	
23	1610.0	0.0	0.0	1840.0	62.9	64.1	2070.0	94.5	95.7	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	93.8	95.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	84.6	85.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	89.4	90.7	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.3	89.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	85.8	87.1	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	87.0	88.3	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	85.3	86.6	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	84.9	86.2	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	86.3	87.5	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	83.7	84.9	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	82.4	83.6	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	83.9	85.1	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	82.9	84.1	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	78.2	79.4	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	81.4	82.6	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	81.0	82.2	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	76.7	77.7	
OASPL		105.6	92.7				115.6	107.5		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
LC-4 / 136				LC-5 / 137			LC-6 / 138			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	97.3	71.1	70.0	103.5	77.3	80.0	108.8	86.3	
2	120.0	87.0	70.9	140.0	93.5	77.4	160.0	104.5	91.1	
3	180.0	80.3	69.4	210.0	92.4	81.5	240.0	101.8	93.2	
4	240.0	75.5	66.9	280.0	86.1	77.5	320.0	97.5	90.9	
5	300.0	64.2	57.6	350.0	80.9	74.3	400.0	95.5	90.7	
6	360.0	64.9	60.1	420.0	74.6	69.8	480.0	88.7	85.5	
7	420.0	41.1	36.3	490.0	71.8	68.6	560.0	82.4	79.2	
8	480.0	0.0	0.0	560.0	57.8	54.6	640.0	79.7	77.8	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	78.9	78.1	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	72.6	71.8	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	70.0	69.2	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	68.4	68.4	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	64.7	64.7	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	57.9	57.9	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		97.8	76.1	104.3		85.4	111.1		98.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
LC-4 / 136			LC-5 / 137			LC-6 / 138				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	98.7	72.5	70.0	106.3	80.1	80.0	108.2	85.7	
2	120.0	95.6	79.5	140.0	103.4	87.3	160.0	109.5	96.1	
3	180.0	90.4	79.5	210.0	98.6	87.7	240.0	106.7	98.1	
4	240.0	82.8	74.2	280.0	95.5	86.9	320.0	103.6	97.0	
5	300.0	76.8	70.2	350.0	89.9	83.3	400.0	102.1	97.3	
6	360.0	58.7	53.9	420.0	84.6	79.8	480.0	101.5	98.3	
7	420.0	0.0	0.0	490.0	82.9	79.7	560.0	98.4	95.2	
8	480.0	0.0	0.0	560.0	79.0	75.8	640.0	94.8	92.9	
9	540.0	0.0	0.0	630.0	69.3	67.4	720.0	90.1	89.3	
10	600.0	0.0	0.0	700.0	62.0	60.1	800.0	89.5	88.7	
11	660.0	0.0	0.0	770.0	62.5	61.7	880.0	87.2	86.4	
12	720.0	0.0	0.0	840.0	62.3	61.5	960.0	82.3	82.3	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	77.8	77.8	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	78.2	76.2	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	74.4	75.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	73.0	73.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	64.3	64.9	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		101.0	83.7			108.9	93.4			114.3 105.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
LC-4 / 136				LC-5 / 137				LC-6 / 138			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	101.8	75.6	70.0	107.8	81.6	80.0	109.9	87.4		
2	120.0	97.9	81.8	140.0	105.1	89.0	160.0	109.8	96.4		
3	180.0	91.1	80.2	210.0	100.6	89.7	240.0	108.9	100.3		
4	240.0	85.7	77.1	280.0	97.1	88.5	320.0	106.2	99.6		
5	300.0	77.5	70.9	350.0	93.1	86.5	400.0	106.0	101.2		
6	360.0	75.9	71.1	420.0	90.7	85.9	480.0	104.3	101.1		
7	420.0	70.1	65.3	490.0	85.6	82.4	560.0	99.6	96.4		
8	480.0	63.1	59.9	560.0	77.4	74.2	640.0	100.4	98.5		
9	540.0	0.0	0.0	630.0	77.4	75.5	720.0	97.8	97.0		
10	600.0	0.0	0.0	700.0	75.0	73.1	800.0	95.1	94.3		
11	660.0	0.0	0.0	770.0	64.9	64.1	880.0	91.7	90.9		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	91.7	91.7		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	88.1	88.1		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	84.6	84.6		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	82.4	83.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	81.2	81.8		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	76.8	77.4		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	72.7	73.7		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	70.2	71.2		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	67.1	68.1		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		103.6	85.7			110.5	95.7			116.1	108.7

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
LC-4 / 136				LC-5 / 137			LC-6 / 138				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	103.8	77.6	70.0	109.0	82.8	80.0	112.9	90.4		
2	120.0	98.8	82.7	140.0	105.6	89.5	160.0	109.7	96.3		
3	180.0	92.1	81.2	210.0	100.3	89.4	240.0	110.4	101.8		
4	240.0	86.6	78.0	280.0	99.9	91.3	320.0	108.3	101.7		
5	300.0	79.8	73.2	350.0	94.3	87.7	400.0	106.0	101.2		
6	360.0	78.8	74.0	420.0	90.8	86.0	480.0	104.4	101.2		
7	420.0	67.6	62.8	490.0	86.7	83.5	560.0	103.8	100.6		
8	480.0	60.0	56.8	560.0	85.3	82.1	640.0	102.1	100.2		
9	540.0	0.0	0.0	630.0	80.7	78.8	720.0	98.6	97.8		
10	600.0	0.0	0.0	700.0	74.2	72.3	800.0	97.3	96.5		
11	660.0	0.0	0.0	770.0	72.2	71.4	880.0	95.3	94.5		
12	720.0	0.0	0.0	840.0	67.8	67.0	960.0	90.8	90.8		
13	780.0	0.0	0.0	910.0	64.8	64.8	1040.0	90.4	90.4		
14	840.0	0.0	0.0	980.0	61.0	61.0	1120.0	88.8	88.8		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	85.2	85.8		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	79.8	80.4		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	81.5	82.1		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	78.4	79.4		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	72.1	73.1		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	71.0	72.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	67.6	68.6		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	61.7	62.7		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		105.2	86.8			111.5	96.8			117.7	110.0

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
LC-4 / 136				LC-5 / 137				LC-6 / 138			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	105.4	79.2	70.0	110.1	83.9	80.0	115.7	93.2		
2	120.0	99.3	83.2	140.0	106.4	90.3	160.0	111.3	97.9		
3	180.0	90.7	79.8	210.0	98.9	88.0	240.0	109.0	100.4		
4	240.0	81.5	72.9	280.0	99.8	91.2	320.0	112.4	105.8		
5	300.0	84.0	77.4	350.0	97.1	90.5	400.0	107.7	102.9		
6	360.0	73.1	68.3	420.0	89.9	85.1	480.0	101.0	97.8		
7	420.0	71.5	66.7	490.0	86.4	83.2	560.0	103.9	100.7		
8	480.0	56.7	53.5	560.0	83.4	80.2	640.0	103.1	101.2		
9	540.0	0.0	0.0	630.0	80.2	78.3	720.0	98.2	97.4		
10	600.0	0.0	0.0	700.0	75.7	73.8	800.0	96.2	95.4		
11	660.0	0.0	0.0	770.0	69.9	69.1	880.0	92.9	92.1		
12	720.0	0.0	0.0	840.0	66.3	65.5	960.0	93.1	93.1		
13	780.0	0.0	0.0	910.0	57.0	57.0	1040.0	90.4	90.4		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	85.6	85.6		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	85.2	85.8		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	84.1	84.7		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	77.4	78.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	76.5	77.5		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	74.9	75.9		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	69.6	70.6		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	67.6	68.6		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	66.6	67.6		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	62.1	63.3		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		106.5	86.8			112.3	97.1			119.5	110.9

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
LC-4 / 136				LC-5 / 137				LC-6 / 138			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	104.6	78.4	70.0	111.2	85.0	80.0	117.6	95.1		
2	120.0	97.3	81.2	140.0	106.2	90.1	160.0	109.8	96.4		
3	180.0	88.4	77.5	210.0	98.8	87.9	240.0	109.1	100.5		
4	240.0	83.1	74.5	280.0	98.7	90.1	320.0	110.8	104.2		
5	300.0	80.0	73.4	350.0	94.7	88.1	400.0	104.2	99.4		
6	360.0	76.0	71.2	420.0	83.3	78.5	480.0	99.2	96.0		
7	420.0	64.3	59.5	490.0	80.8	77.6	560.0	102.0	98.8		
8	480.0	0.0	0.0	560.0	81.7	78.5	640.0	96.9	95.0		
9	540.0	0.0	0.0	630.0	74.4	72.5	720.0	86.7	85.9		
10	600.0	0.0	0.0	700.0	61.1	59.2	800.0	94.0	93.2		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	88.7	87.9		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	80.2	80.2		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	80.5	80.5		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	79.8	79.8		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	71.5	72.1		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		105.5	85.1	112.9		95.9	119.7		108.6		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
LC-4 / 136				LC-5 / 137				LC-6 / 138			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	98.8	72.6	70.0	110.4	84.2	80.0	115.3	92.8		
2	120.0	92.2	76.1	140.0	99.2	83.1	160.0	106.2	92.8		
3	180.0	80.7	69.8	210.0	94.7	83.8	240.0	100.9	92.3		
4	240.0	59.9	51.3	280.0	78.8	70.2	320.0	95.1	88.5		
5	300.0	0.0	0.0	350.0	76.5	69.9	400.0	91.0	86.2		
6	360.0	0.0	0.0	420.0	70.1	65.3	480.0	76.7	73.5		
7	420.0	0.0	0.0	490.0	71.3	68.1	560.0	0.0	0.0		
8	480.0	0.0	0.0	560.0	69.3	66.1	640.0	0.0	0.0		
9	540.0	0.0	0.0	630.0	52.6	50.7	720.0	0.0	0.0		
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		99.7	78.4			110.8	88.7			115.9	95.2

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

AD-A174 981

DFVLR/FAA (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER 6/6

LUFT UND RAUMFAHR (U) DEUTSCHE FORSCHUNGS- UND

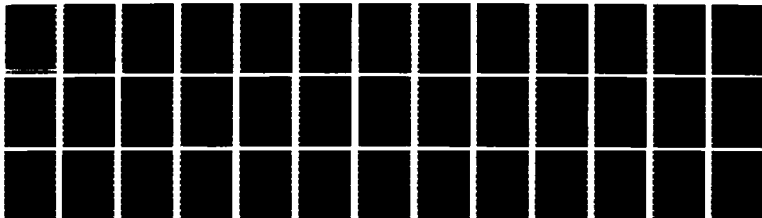
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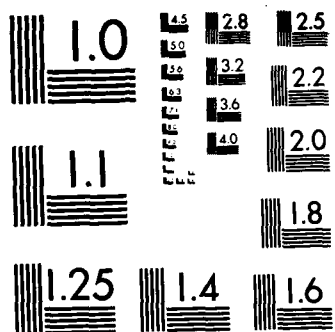
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
LC-4 / 136				LC-5 / 137			LC-6 / 138			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	104.2	78.0	70.0	110.6	84.4	80.0	111.7	89.2	
2	120.0	97.8	81.7	140.0	109.5	93.4	160.0	110.4	97.0	
3	180.0	90.4	79.5	210.0	105.3	94.4	240.0	110.4	101.8	
4	240.0	83.5	74.9	280.0	100.5	91.9	320.0	107.3	100.7	
5	300.0	80.1	73.5	350.0	94.2	87.6	400.0	106.6	101.8	
6	360.0	71.3	66.5	420.0	92.5	87.7	480.0	104.5	101.3	
7	420.0	0.0	0.0	490.0	89.2	86.0	560.0	102.2	99.0	
8	480.0	0.0	0.0	560.0	85.1	81.9	640.0	99.8	97.9	
9	540.0	0.0	0.0	630.0	80.3	78.4	720.0	98.8	98.0	
10	600.0	0.0	0.0	700.0	79.7	77.8	800.0	97.0	96.2	
11	660.0	0.0	0.0	770.0	75.4	74.6	880.0	94.0	93.2	
12	720.0	0.0	0.0	840.0	73.1	72.3	960.0	91.4	91.4	
13	780.0	0.0	0.0	910.0	67.2	67.2	1040.0	89.6	89.6	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	86.8	86.8	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	84.0	84.6	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	83.0	83.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	79.5	80.1	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	76.6	77.6	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	72.3	73.3	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		105.3	85.5	114.1		99.4	117.3		109.6	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
LC-4 / 136				LC-5 / 137				LC-6 / 138		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	105.4	79.2	70.0	106.5	80.3	80.0	111.7	89.2	
2	120.0	96.2	80.1	140.0	103.5	87.4	160.0	107.9	94.5	
3	180.0	90.6	79.7	210.0	96.2	85.3	240.0	106.1	97.5	
4	240.0	83.4	74.8	280.0	99.9	91.3	320.0	108.3	101.7	
5	300.0	81.2	74.6	350.0	93.0	86.4	400.0	103.4	98.6	
6	360.0	75.8	71.0	420.0	87.0	82.2	480.0	102.5	99.3	
7	420.0	67.6	62.8	490.0	84.6	81.4	560.0	103.0	99.8	
8	480.0	0.0	0.0	560.0	82.0	78.8	640.0	98.8	96.9	
9	540.0	0.0	0.0	630.0	80.0	78.1	720.0	97.2	96.4	
10	600.0	0.0	0.0	700.0	72.3	70.4	800.0	96.2	95.4	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	93.1	92.3	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	89.8	89.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	90.9	90.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	86.7	86.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	84.1	84.7	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	79.6	80.2	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	80.8	81.4	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	77.6	78.6	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	72.9	73.9	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	71.8	72.8	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	68.4	69.4	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		106.1	85.5	109.2		95.1	116.0		108.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127				FC-2 / 128			FC-3 / 129			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	103.7	77.5	80.0	108.8	86.3	90.0	113.9	94.8	
2	140.0	97.6	81.5	160.0	107.8	94.4	180.0	113.1	102.2	
3	210.0	95.4	84.5	240.0	106.0	97.4	270.0	114.6	106.0	
4	280.0	89.8	81.2	320.0	102.6	96.0	360.0	114.0	109.2	
5	350.0	83.7	77.1	400.0	101.6	96.8	450.0	112.6	109.4	
6	420.0	81.3	76.5	480.0	95.9	92.7	540.0	110.6	107.4	
7	490.0	76.7	73.5	560.0	93.2	90.0	630.0	111.1	109.2	
8	560.0	70.8	67.6	640.0	91.8	89.9	720.0	110.1	109.3	
9	630.0	64.2	62.3	720.0	88.5	87.7	810.0	108.8	108.0	
10	700.0	62.2	60.3	800.0	87.1	86.3	900.0	108.3	108.3	
11	770.0	0.0	0.0	880.0	82.7	81.9	990.0	106.9	106.9	
12	840.0	0.0	0.0	960.0	81.2	81.2	1080.0	104.0	104.0	
13	910.0	0.0	0.0	1040.0	78.9	78.9	1170.0	101.7	102.3	
14	980.0	0.0	0.0	1120.0	71.3	71.3	1260.0	100.5	101.1	
15	1050.0	0.0	0.0	1200.0	67.8	68.4	1350.0	98.5	99.1	
16	1120.0	0.0	0.0	1280.0	64.4	65.0	1440.0	95.3	96.3	
17	1190.0	0.0	0.0	1360.0	63.2	63.8	1530.0	97.3	98.3	
18	1260.0	0.0	0.0	1440.0	61.9	62.9	1620.0	94.4	95.4	
19	1330.0	0.0	0.0	1520.0	56.0	57.0	1710.0	90.0	91.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	91.4	92.6	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	89.2	90.4	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	87.0	88.2	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	83.3	84.5	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	82.1	83.3	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	83.4	84.7	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	79.9	81.2	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	78.2	79.5	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	80.9	82.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	78.9	80.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	72.9	74.2	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	71.7	73.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	75.4	76.6	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	72.7	73.9	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	73.0	74.2	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	73.3	74.5	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	65.4	66.6	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		105.3	88.7	113.4 103.6			122.5 118.5			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127				FC-2 / 128			FC-3 / 129			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.8	80.6	80.0	110.3	87.8	90.0	113.5	94.4	
2	140.0	103.4	87.3	160.0	111.3	97.9	180.0	120.3	109.4	
3	210.0	100.6	89.7	240.0	109.0	100.4	270.0	118.6	110.0	
4	280.0	97.0	88.4	320.0	105.9	99.3	360.0	117.7	112.9	
5	350.0	92.4	85.8	400.0	105.5	100.7	450.0	119.4	116.2	
6	420.0	89.9	85.1	480.0	106.1	102.9	540.0	120.0	116.8	
7	490.0	87.3	84.1	560.0	103.0	99.8	630.0	116.9	115.0	
8	560.0	83.4	80.2	640.0	100.1	98.2	720.0	115.9	115.1	
9	630.0	77.0	75.1	720.0	97.3	96.5	810.0	116.7	115.9	
10	700.0	72.4	70.5	800.0	96.2	95.4	900.0	117.3	117.3	
11	770.0	71.6	70.8	880.0	95.1	94.3	990.0	114.5	114.5	
12	840.0	67.8	67.0	960.0	91.7	91.7	1080.0	114.0	114.0	
13	910.0	62.8	62.8	1040.0	88.3	88.3	1170.0	113.9	114.5	
14	980.0	60.6	60.6	1120.0	86.7	86.7	1260.0	112.9	113.5	
15	1050.0	53.3	53.3	1200.0	84.9	85.5	1350.0	111.7	112.3	
16	1120.0	0.0	0.0	1280.0	82.4	83.0	1440.0	109.9	110.9	
17	1190.0	0.0	0.0	1360.0	79.3	79.9	1530.0	109.2	110.2	
18	1260.0	0.0	0.0	1440.0	76.1	77.1	1620.0	108.4	109.4	
19	1330.0	0.0	0.0	1520.0	74.5	75.5	1710.0	106.5	107.5	
20	1400.0	0.0	0.0	1600.0	71.1	72.1	1800.0	104.9	106.1	
21	1470.0	0.0	0.0	1680.0	68.0	69.0	1890.0	103.6	104.8	
22	1540.0	0.0	0.0	1760.0	65.7	66.7	1980.0	104.3	105.5	
23	1610.0	0.0	0.0	1840.0	65.6	66.8	2070.0	101.7	102.9	
24	1680.0	0.0	0.0	1920.0	59.6	60.8	2160.0	100.5	101.7	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	100.7	102.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	100.6	101.9	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	99.6	100.9	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	98.6	99.9	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	100.0	101.3	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	99.4	100.7	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	97.6	98.9	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	96.6	97.8	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	97.3	98.5	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	97.8	99.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	95.9	97.1	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	94.2	95.4	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	95.0	96.2	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	94.6	95.8	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	93.0	94.2	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	92.0	93.0	
OASPL		109.5	95.3	116.8			109.4	129.0		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127				FC-2 / 128				FC-3 / 129		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.9	81.7	80.0	113.0	90.5	90.0	115.6	96.5	
2	140.0	104.8	88.7	160.0	111.8	98.4	180.0	117.1	106.2	
3	210.0	101.0	90.1	240.0	111.3	102.7	270.0	116.5	107.9	
4	280.0	98.0	89.4	320.0	108.4	101.8	360.0	118.6	113.8	
5	350.0	93.9	87.3	400.0	109.0	104.2	450.0	119.3	116.1	
6	420.0	92.7	87.9	480.0	106.2	103.0	540.0	116.2	113.0	
7	490.0	88.0	84.8	560.0	102.2	99.0	630.0	118.7	116.8	
8	560.0	83.0	79.8	640.0	102.8	100.9	720.0	118.6	117.8	
9	630.0	81.2	79.3	720.0	101.4	100.6	810.0	117.8	117.0	
10	700.0	77.3	75.4	800.0	98.4	97.6	900.0	117.6	117.6	
11	770.0	73.8	73.0	880.0	95.9	95.1	990.0	117.7	117.7	
12	840.0	69.4	68.6	960.0	95.5	95.5	1080.0	115.7	115.7	
13	910.0	64.9	64.9	1040.0	93.0	93.0	1170.0	113.7	114.3	
14	980.0	64.8	64.8	1120.0	89.0	89.0	1260.0	115.2	115.8	
15	1050.0	0.0	0.0	1200.0	87.2	87.8	1350.0	113.7	114.3	
16	1120.0	0.0	0.0	1280.0	87.3	87.9	1440.0	111.2	112.2	
17	1190.0	0.0	0.0	1360.0	82.9	83.5	1530.0	110.5	111.5	
18	1260.0	0.0	0.0	1440.0	78.8	79.8	1620.0	111.4	112.4	
19	1330.0	0.0	0.0	1520.0	76.9	77.9	1710.0	109.0	110.0	
20	1400.0	0.0	0.0	1600.0	75.5	76.5	1800.0	105.7	106.9	
21	1470.0	0.0	0.0	1680.0	71.1	72.1	1890.0	106.0	107.2	
22	1540.0	0.0	0.0	1760.0	66.5	67.5	1980.0	105.9	107.1	
23	1610.0	0.0	0.0	1840.0	64.2	65.4	2070.0	103.6	104.8	
24	1680.0	0.0	0.0	1920.0	63.4	64.6	2160.0	103.0	104.2	
25	1750.0	0.0	0.0	2000.0	62.9	64.1	2250.0	104.4	105.7	
26	1820.0	0.0	0.0	2080.0	58.5	59.7	2340.0	102.4	103.7	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	101.3	102.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	102.8	104.1	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	103.2	104.5	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	101.8	103.1	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	101.3	102.6	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	102.3	103.5	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	102.2	103.4	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	101.4	102.6	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	98.7	99.9	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	98.9	100.1	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	100.4	101.6	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	99.1	100.3	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	95.9	97.1	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	97.0	98.0	
OASPL		110.6	96.5	118.7		111.3	129.3		127.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
FC-1 / 127				FC-2 / 128				FC-3 / 129			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	109.5	83.3	80.0	116.0	93.5	90.0	116.5	97.4		
2	140.0	105.8	89.7	160.0	111.7	98.3	180.0	115.6	104.7		
3	210.0	100.9	90.0	240.0	112.4	103.8	270.0	118.1	109.5		
4	280.0	99.5	90.9	320.0	110.0	103.4	360.0	117.7	112.9		
5	350.0	94.5	87.9	400.0	107.7	102.9	450.0	118.2	115.0		
6	420.0	91.8	87.0	480.0	105.8	102.6	540.0	116.6	113.4		
7	490.0	87.3	84.1	560.0	104.2	101.0	630.0	118.7	116.8		
8	560.0	84.6	81.4	640.0	102.9	101.0	720.0	116.8	116.0		
9	630.0	81.7	79.8	720.0	100.0	99.2	810.0	116.4	115.6		
10	700.0	76.7	74.8	800.0	98.6	97.8	900.0	117.2	117.2		
11	770.0	72.4	71.6	880.0	96.7	95.9	990.0	115.2	115.2		
12	840.0	69.7	68.9	960.0	92.9	92.9	1080.0	114.8	114.8		
13	910.0	66.3	66.3	1040.0	91.8	91.8	1170.0	114.8	115.4		
14	980.0	59.5	59.5	1120.0	90.5	90.5	1260.0	112.0	112.6		
15	1050.0	0.0	0.0	1200.0	87.1	87.7	1350.0	112.1	112.7		
16	1120.0	0.0	0.0	1280.0	83.1	83.7	1440.0	111.1	112.1		
17	1190.0	0.0	0.0	1360.0	82.8	83.4	1530.0	108.6	109.6		
18	1260.0	0.0	0.0	1440.0	80.2	81.2	1620.0	106.8	107.8		
19	1330.0	0.0	0.0	1520.0	76.2	77.2	1710.0	107.5	108.5		
20	1400.0	0.0	0.0	1600.0	73.2	74.2	1800.0	105.8	107.0		
21	1470.0	0.0	0.0	1680.0	70.6	71.6	1890.0	102.4	103.6		
22	1540.0	0.0	0.0	1760.0	69.1	70.1	1980.0	102.7	103.9		
23	1610.0	0.0	0.0	1840.0	67.1	68.3	2070.0	102.1	103.3		
24	1680.0	0.0	0.0	1920.0	61.6	62.8	2160.0	99.5	100.7		
25	1750.0	0.0	0.0	2000.0	60.2	61.4	2250.0	100.8	102.1		
26	1820.0	0.0	0.0	2080.0	57.2	58.4	2340.0	99.9	101.2		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	100.0	101.3		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	100.7	102.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	101.0	102.3		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	100.2	101.5		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	99.9	101.2		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	100.0	101.2		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	98.4	99.6		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	96.8	98.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	98.6	99.8		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	97.5	98.7		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	95.1	96.3		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	96.2	97.4		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	95.3	96.5		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	93.7	94.7		
OASPL		111.9	97.0			119.9	111.5			128.5	126.7

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
FC-1 / 127				FC-2 / 128				FC-3 / 129			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	110.7	84.5	80.0	118.2	95.7	90.0	118.0	98.9		
2	140.0	106.6	90.5	160.0	112.8	99.4	180.0	115.1	104.2		
3	210.0	98.9	88.0	240.0	110.3	101.7	270.0	118.4	109.8		
4	280.0	98.2	89.6	320.0	113.0	106.4	360.0	121.0	116.2		
5	350.0	97.3	90.7	400.0	108.0	103.2	450.0	113.5	110.3		
6	420.0	88.9	84.1	480.0	101.4	98.2	540.0	116.3	113.1		
7	490.0	83.8	80.6	560.0	103.4	100.2	630.0	117.5	115.6		
8	560.0	83.2	80.0	640.0	102.1	100.2	720.0	113.1	112.3		
9	630.0	78.9	77.0	720.0	97.6	96.8	810.0	113.8	113.0		
10	700.0	72.6	70.7	800.0	93.9	93.1	900.0	113.1	113.1		
11	770.0	69.3	68.5	880.0	92.9	92.1	990.0	112.7	112.7		
12	840.0	62.8	62.0	960.0	92.2	92.2	1080.0	110.9	110.9		
13	910.0	0.0	0.0	1040.0	89.4	89.4	1170.0	109.9	110.5		
14	980.0	0.0	0.0	1120.0	85.0	85.0	1260.0	109.9	110.5		
15	1050.0	0.0	0.0	1200.0	83.2	83.8	1350.0	107.0	107.6		
16	1120.0	0.0	0.0	1280.0	82.6	83.2	1440.0	105.6	106.6		
17	1190.0	0.0	0.0	1360.0	76.0	76.6	1530.0	104.7	105.7		
18	1260.0	0.0	0.0	1440.0	73.3	74.3	1620.0	102.4	103.4		
19	1330.0	0.0	0.0	1520.0	72.4	73.4	1710.0	100.4	101.4		
20	1400.0	0.0	0.0	1600.0	68.3	69.3	1800.0	100.7	101.9		
21	1470.0	0.0	0.0	1680.0	64.2	65.2	1890.0	97.6	98.8		
22	1540.0	0.0	0.0	1760.0	64.0	65.0	1980.0	96.4	97.6		
23	1610.0	0.0	0.0	1840.0	61.7	62.9	2070.0	97.7	98.9		
24	1680.0	0.0	0.0	1920.0	59.7	60.9	2160.0	95.0	96.2		
25	1750.0	0.0	0.0	2000.0	56.7	57.9	2250.0	93.4	94.7		
26	1820.0	0.0	0.0	2080.0	56.0	57.2	2340.0	95.2	96.5		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	90.3	91.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	94.2	95.5		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	88.9	90.2		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	91.0	92.3		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	93.1	94.4		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	86.8	88.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	90.5	91.7		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	91.4	92.6		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	85.4	86.6		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	88.8	90.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	87.6	88.8		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	80.8	82.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	85.6	86.8		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	80.9	81.9		
OASPL		112.6	96.7		121.1	111.2		127.4	124.1		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127				FC-2 / 128			FC-3 / 129			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	111.1	84.9	80.0	118.9	96.4	90.0	118.1	99.0	
2	140.0	104.9	88.8	160.0	111.6	98.2	180.0	115.3	104.4	
3	210.0	95.7	84.8	240.0	109.1	100.5	270.0	116.6	108.0	
4	280.0	96.7	88.1	320.0	109.4	102.8	360.0	115.6	110.8	
5	350.0	89.9	83.3	400.0	102.8	98.0	450.0	105.9	102.7	
6	420.0	80.1	75.3	480.0	98.1	94.9	540.0	113.3	110.1	
7	490.0	75.9	72.7	560.0	99.0	95.8	630.0	109.1	107.2	
8	560.0	78.0	74.8	640.0	93.1	91.2	720.0	102.2	101.4	
9	630.0	69.9	68.0	720.0	77.9	77.1	810.0	108.6	107.8	
10	700.0	58.3	56.4	800.0	91.1	90.3	900.0	102.7	102.7	
11	770.0	0.0	0.0	880.0	83.0	82.2	990.0	97.4	97.4	
12	840.0	0.0	0.0	960.0	76.1	76.1	1080.0	101.4	101.4	
13	910.0	0.0	0.0	1040.0	77.1	77.1	1170.0	95.5	96.1	
14	980.0	0.0	0.0	1120.0	77.4	77.4	1260.0	92.9	93.5	
15	1050.0	0.0	0.0	1200.0	66.8	67.4	1350.0	93.8	94.4	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	89.7	90.7	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	86.9	87.9	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	86.2	87.2	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	89.7	90.7	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	78.0	79.2	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	80.8	82.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	78.5	79.7	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	67.8	69.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		112.3	93.7	120.5		107.6	123.6		117.1	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127				FC-2 / 128				FC-3 / 129		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.8	82.6	80.0	114.8	92.3	90.0	117.5	98.4	
2	140.0	96.9	80.8	160.0	105.8	92.4	180.0	0.0	0.0	
3	210.0	88.2	77.3	240.0	102.1	93.5	270.0	0.0	0.0	
4	280.0	78.2	69.6	320.0	94.4	87.8	360.0	0.0	0.0	
5	350.0	77.8	71.2	400.0	88.3	83.5	450.0	0.0	0.0	
6	420.0	64.8	60.0	480.0	80.9	77.7	540.0	0.0	0.0	
7	490.0	67.5	64.3	560.0	82.4	79.2	630.0	0.0	0.0	
8	560.0	65.9	62.7	640.0	81.2	79.3	720.0	0.0	0.0	
9	630.0	60.6	58.7	720.0	76.8	76.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	70.8	70.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	73.9	73.1	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	65.4	65.4	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		109.2	85.9	115.5		98.3	117.5		98.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127			FC-2 / 128			FC-3 / 129				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.9	80.7	80.0	113.7	91.2	90.0	111.7	92.6	
2	140.0	105.5	89.4	160.0	111.0	97.6	180.0	115.6	104.7	
3	210.0	101.3	90.4	240.0	110.8	102.2	270.0	116.4	107.8	
4	280.0	98.3	89.7	320.0	108.7	102.1	360.0	116.6	111.8	
5	350.0	94.0	87.4	400.0	107.4	102.6	450.0	116.9	113.7	
6	420.0	91.0	86.2	480.0	105.0	101.8	540.0	117.4	114.2	
7	490.0	87.0	83.8	560.0	103.3	100.1	630.0	117.5	115.6	
8	560.0	84.7	81.5	640.0	101.5	99.6	720.0	116.6	115.8	
9	630.0	80.6	78.7	720.0	100.2	99.4	810.0	116.4	115.6	
10	700.0	77.3	75.4	800.0	98.1	97.3	900.0	114.7	114.7	
11	770.0	73.0	72.2	880.0	95.6	94.8	990.0	114.8	114.8	
12	840.0	0.0	0.0	960.0	92.9	92.9	1080.0	113.5	113.5	
13	910.0	0.0	0.0	1040.0	90.5	90.5	1170.0	112.8	113.4	
14	980.0	0.0	0.0	1120.0	88.9	88.9	1260.0	111.4	112.0	
15	1050.0	0.0	0.0	1200.0	86.0	86.6	1350.0	110.7	111.3	
16	1120.0	0.0	0.0	1280.0	83.8	84.4	1440.0	109.1	110.1	
17	1190.0	0.0	0.0	1360.0	81.7	82.3	1530.0	107.6	108.6	
18	1260.0	0.0	0.0	1440.0	78.9	79.9	1620.0	106.5	107.5	
19	1330.0	0.0	0.0	1520.0	75.4	76.4	1710.0	104.7	105.7	
20	1400.0	0.0	0.0	1600.0	70.8	71.8	1800.0	103.8	105.0	
21	1470.0	0.0	0.0	1680.0	71.0	72.0	1890.0	102.6	103.8	
22	1540.0	0.0	0.0	1760.0	66.3	67.3	1980.0	100.6	101.8	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	100.5	101.7	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	99.2	100.4	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	98.0	99.3	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	98.4	99.7	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	98.1	99.4	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	97.9	99.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	98.2	99.5	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	98.1	99.4	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	97.5	98.8	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	97.9	99.1	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	96.8	98.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	96.1	97.3	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	96.3	97.5	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	94.9	96.1	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	94.5	95.7	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	94.2	95.4	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	92.0	93.2	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	92.1	93.1	
OASPL		110.4	96.5		118.5	110.6		127.4	125.6	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
FC-1 / 127				FC-2 / 128			FC-3 / 129			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.3	81.1	80.0	114.1	91.6	90.0	113.9	94.8	
2	140.0	104.5	88.4	160.0	108.7	95.3	180.0	111.2	100.3	
3	210.0	95.7	84.8	240.0	108.8	100.2	270.0	118.9	110.3	
4	280.0	100.4	91.8	320.0	110.2	103.6	360.0	117.1	112.3	
5	350.0	95.0	88.4	400.0	104.4	99.6	450.0	114.4	111.2	
6	420.0	87.7	82.9	480.0	103.9	100.7	540.0	117.9	114.7	
7	490.0	83.7	80.5	560.0	104.4	101.2	630.0	114.4	112.5	
8	560.0	84.5	81.3	640.0	99.9	98.0	720.0	115.1	114.3	
9	630.0	78.6	76.7	720.0	96.0	95.2	810.0	116.7	115.9	
10	700.0	75.1	73.2	800.0	98.3	97.5	900.0	112.1	112.1	
11	770.0	64.1	63.3	880.0	93.0	92.2	990.0	113.4	113.4	
12	840.0	0.0	0.0	960.0	90.1	90.1	1080.0	113.8	113.8	
13	910.0	0.0	0.0	1040.0	91.8	91.8	1170.0	112.2	112.8	
14	980.0	0.0	0.0	1120.0	86.6	86.6	1260.0	109.6	110.2	
15	1050.0	0.0	0.0	1200.0	86.4	87.0	1350.0	111.1	111.7	
16	1120.0	0.0	0.0	1280.0	82.4	83.0	1440.0	109.4	110.4	
17	1190.0	0.0	0.0	1360.0	80.0	80.6	1530.0	105.9	106.9	
18	1260.0	0.0	0.0	1440.0	78.1	79.1	1620.0	107.6	108.6	
19	1330.0	0.0	0.0	1520.0	73.5	74.5	1710.0	104.7	105.7	
20	1400.0	0.0	0.0	1600.0	73.0	74.0	1800.0	103.7	104.9	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	104.3	105.5	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	100.5	101.7	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	101.8	103.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	103.1	104.3	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	93.8	95.1	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	102.4	103.7	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	100.5	101.8	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	98.0	99.3	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	100.8	102.1	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	98.6	99.9	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	98.6	99.9	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	99.6	100.8	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	97.2	98.4	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	98.0	99.2	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	97.8	99.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	98.0	99.2	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	93.4	94.6	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	97.5	98.7	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	96.6	97.8	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	89.9	90.9	
OASPL		110.1	95.8	117.9 109.7			127.0 125.0			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
FC-4 / 124			FC-5 / 125			FC-6 / 126				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	102.6	76.4	70.0	106.1	79.9	80.0	111.0	88.5	
2	120.0	92.7	76.6	140.0	99.1	83.0	160.0	109.1	95.7	
3	180.0	86.3	75.4	210.0	97.1	86.2	240.0	107.6	99.0	
4	240.0	77.3	68.7	280.0	92.6	84.0	320.0	104.4	97.8	
5	300.0	74.8	68.2	350.0	86.4	79.8	400.0	103.5	98.7	
6	360.0	70.8	66.0	420.0	84.3	79.5	480.0	98.5	95.3	
7	420.0	55.9	51.1	490.0	79.4	76.2	560.0	95.2	92.0	
8	480.0	0.0	0.0	560.0	69.9	66.7	640.0	94.7	92.8	
9	540.0	0.0	0.0	630.0	64.7	62.8	720.0	92.1	91.3	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	86.6	85.8	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	86.3	85.5	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	81.5	81.5	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	80.8	80.8	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	74.4	74.4	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	70.8	71.4	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	68.6	69.2	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	68.4	69.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	62.0	63.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		103.1	81.5			107.5	90.8			115.2 105.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
FC-4 / 124				FC-5 / 125				FC-6 / 126		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	103.6	77.4	70.0	109.3	83.1	80.0	111.9	89.4	
2	120.0	99.2	83.1	140.0	105.5	89.4	160.0	112.9	99.5	
3	180.0	95.0	84.1	210.0	102.9	92.0	240.0	110.7	102.1	
4	240.0	88.1	79.5	280.0	98.4	89.8	320.0	107.9	101.3	
5	300.0	79.3	72.7	350.0	94.7	88.1	400.0	107.4	102.6	
6	360.0	76.4	71.6	420.0	91.0	86.2	480.0	107.2	104.0	
7	420.0	74.1	69.3	490.0	89.2	86.0	560.0	104.6	101.4	
8	480.0	62.0	58.8	560.0	85.3	82.1	640.0	101.9	100.0	
9	540.0	58.2	55.0	630.0	76.8	74.9	720.0	99.2	98.4	
10	600.0	0.0	0.0	700.0	74.7	72.8	800.0	98.3	97.5	
11	660.0	0.0	0.0	770.0	70.2	69.4	880.0	97.0	96.2	
12	720.0	0.0	0.0	840.0	69.1	68.3	960.0	94.4	94.4	
13	780.0	0.0	0.0	910.0	64.7	64.7	1040.0	91.1	91.1	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	89.6	89.6	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	86.8	87.4	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	85.2	85.8	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	82.1	82.7	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	78.0	79.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	77.1	78.1	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	74.5	75.5	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	71.5	72.5	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	67.7	68.7	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	62.2	63.4	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		105.5	88.1	111.8		97.2	118.5		111.1	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

MICROPHONE: MP 3 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
FC-4 / 124				FC-5 / 125			FC-6 / 126			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	106.1	79.9	70.0	110.8	84.6	80.0	114.3	91.8	
2	120.0	100.2	84.1	140.0	107.1	91.0	160.0	113.4	100.0	
3	180.0	93.9	83.0	210.0	103.6	92.7	240.0	113.2	104.6	
4	240.0	89.0	80.4	280.0	100.1	91.5	320.0	109.9	103.3	
5	300.0	83.2	76.6	350.0	96.3	89.7	400.0	111.1	106.3	
6	360.0	74.5	69.7	420.0	94.9	90.1	480.0	108.1	104.9	
7	420.0	72.4	67.6	490.0	89.7	86.5	560.0	104.3	101.1	
8	480.0	67.3	64.1	560.0	84.0	80.8	640.0	104.9	103.0	
9	540.0	65.9	62.7	630.0	82.9	81.0	720.0	103.6	102.8	
10	600.0	44.4	42.5	700.0	77.7	75.8	800.0	100.6	99.8	
11	660.0	0.0	0.0	770.0	75.2	74.4	880.0	98.7	97.9	
12	720.0	0.0	0.0	840.0	69.5	68.7	960.0	97.9	97.9	
13	780.0	0.0	0.0	910.0	68.0	68.0	1040.0	95.2	95.2	
14	840.0	0.0	0.0	980.0	57.2	57.2	1120.0	91.5	91.5	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	90.0	90.6	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	89.3	89.9	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	85.3	85.9	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	81.9	82.9	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	79.2	80.2	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	78.8	79.8	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	75.4	76.4	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	71.9	72.9	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	68.1	69.3	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	69.1	70.3	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	65.7	66.9	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	63.5	64.7	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	58.2	59.4	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.4	88.6	113.3		98.8	120.4		113.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
FC-4 / 124				FC-5 / 125				FC-6 / 126		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	107.5	81.3	70.0	112.4	86.2	80.0	117.2	94.7	
2	120.0	101.1	85.0	140.0	108.8	92.7	160.0	113.0	99.6	
3	180.0	94.1	83.2	210.0	103.6	92.7	240.0	114.1	105.5	
4	240.0	87.8	79.2	280.0	102.8	94.2	320.0	111.9	105.3	
5	300.0	84.4	77.8	350.0	96.6	90.0	400.0	109.0	104.2	
6	360.0	82.3	77.5	420.0	94.0	89.2	480.0	107.8	104.6	
7	420.0	72.7	67.9	490.0	89.3	86.1	560.0	106.4	103.2	
8	480.0	61.0	57.8	560.0	87.4	84.2	640.0	104.7	102.8	
9	540.0	0.0	0.0	630.0	82.9	81.0	720.0	101.7	100.9	
10	600.0	0.0	0.0	700.0	77.3	75.4	800.0	100.3	99.5	
11	660.0	0.0	0.0	770.0	73.0	72.2	880.0	98.9	98.1	
12	720.0	0.0	0.0	840.0	71.8	71.0	960.0	94.6	94.6	
13	780.0	0.0	0.0	910.0	65.1	65.1	1040.0	94.3	94.3	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	92.9	92.9	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	88.9	89.5	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	85.0	85.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	85.1	85.7	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	81.9	82.9	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	78.1	79.1	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	75.0	76.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	73.2	74.2	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	70.3	71.3	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	67.1	68.3	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	63.1	64.3	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		108.6	89.4			114.8	99.8			121.4 113.3

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
FC-4 / 124				FC-5 / 125				FC-6 / 126			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	108.7	82.5	70.0	114.0	87.8	80.0	119.6	97.1		
2	120.0	102.4	86.3	140.0	110.4	94.3	160.0	114.3	100.9		
3	180.0	93.2	82.3	210.0	102.0	91.1	240.0	112.3	103.7		
4	240.0	83.6	75.0	280.0	101.6	93.0	320.0	115.1	108.5		
5	300.0	79.6	73.0	350.0	100.5	93.9	400.0	110.0	105.2		
6	360.0	79.6	74.8	420.0	91.5	86.7	480.0	103.0	99.8		
7	420.0	76.3	71.5	490.0	87.6	84.4	560.0	105.2	102.0		
8	480.0	64.0	60.8	560.0	84.7	81.5	640.0	104.2	102.3		
9	540.0	0.0	0.0	630.0	81.7	79.8	720.0	99.5	98.7		
10	600.0	0.0	0.0	700.0	76.2	74.3	800.0	96.5	95.7		
11	660.0	0.0	0.0	770.0	66.5	65.7	880.0	94.1	93.3		
12	720.0	0.0	0.0	840.0	69.5	68.7	960.0	93.9	93.9		
13	780.0	0.0	0.0	910.0	54.9	54.9	1040.0	91.3	91.3		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	87.1	87.1		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	85.5	86.1		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	84.2	84.8		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	77.6	78.2		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	73.6	74.6		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	75.0	76.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	70.1	71.1		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	68.3	69.3		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		109.7	89.4			116.1	100.0			122.7	113.1

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
FC-4 / 124				FC-5 / 125				FC-6 / 126			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	108.3	82.1	70.0	115.1	88.9	80.0	120.4	97.9		
2	120.0	101.7	85.6	140.0	109.1	93.0	160.0	113.1	99.7		
3	180.0	91.4	80.5	210.0	100.2	89.3	240.0	111.0	102.4		
4	240.0	85.4	76.8	280.0	100.3	91.7	320.0	111.2	104.6		
5	300.0	82.1	75.5	350.0	92.9	86.3	400.0	103.1	98.3		
6	360.0	78.0	73.2	420.0	82.9	78.1	480.0	99.7	96.5		
7	420.0	73.6	68.8	490.0	79.4	76.2	560.0	101.1	97.9		
8	480.0	64.1	60.9	560.0	79.2	76.0	640.0	94.4	92.5		
9	540.0	0.0	0.0	630.0	72.0	70.1	720.0	83.6	82.8		
10	600.0	0.0	0.0	700.0	61.6	59.7	800.0	93.0	92.2		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	86.2	85.4		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	77.8	77.8		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	79.3	79.3		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	74.6	74.6		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	59.6	60.2		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		109.3	88.7			116.3	97.5			122.1	109.2

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
FC-4 / 124				FC-5 / 125				FC-6 / 126			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	105.0	78.8	70.0	113.1	86.9	80.0	116.5	94.0		
2	120.0	90.4	74.3	140.0	99.7	83.6	160.0	106.7	93.3		
3	180.0	79.5	68.6	210.0	90.8	79.9	240.0	102.3	93.7		
4	240.0	73.3	64.7	280.0	81.6	73.0	320.0	95.9	89.3		
5	300.0	75.6	69.0	350.0	81.7	75.1	400.0	92.9	88.1		
6	360.0	70.6	65.8	420.0	69.4	64.6	480.0	64.0	60.8		
7	420.0	70.0	65.2	490.0	72.4	69.2	560.0	0.0	0.0		
8	480.0	63.8	60.6	560.0	59.5	56.3	640.0	0.0	0.0		
9	540.0	57.6	54.4	630.0	0.0	0.0	720.0	0.0	0.0		
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		105.1	81.1		113.3	89.4		117.2	99.3		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 24 ° DEG)

DATA-POINT RUN											
FC-4 / 124				FC-5 / 125				FC-6 / 126			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	106.9	80.7	70.0	111.3	85.1	80.0	115.1	92.6		
2	120.0	100.5	84.4	140.0	109.6	93.5	160.0	113.1	99.7		
3	180.0	93.5	82.6	210.0	105.2	94.3	240.0	112.3	103.7		
4	240.0	87.4	78.8	280.0	101.7	93.1	320.0	110.3	103.7		
5	300.0	83.7	77.1	350.0	96.9	90.3	400.0	108.8	104.0		
6	360.0	77.8	73.0	420.0	93.5	88.7	480.0	106.7	103.5		
7	420.0	71.8	67.0	490.0	89.3	86.1	560.0	105.2	102.0		
8	480.0	0.0	0.0	560.0	86.3	83.1	640.0	103.0	101.1		
9	540.0	0.0	0.0	630.0	82.8	80.9	720.0	102.1	101.3		
10	600.0	0.0	0.0	700.0	77.1	75.2	800.0	100.0	99.2		
11	660.0	0.0	0.0	770.0	74.0	73.2	880.0	97.1	96.3		
12	720.0	0.0	0.0	840.0	71.6	70.8	960.0	95.7	95.7		
13	780.0	0.0	0.0	910.0	72.5	72.5	1040.0	92.3	92.3		
14	840.0	0.0	0.0	980.0	59.9	59.9	1120.0	91.3	91.3		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	88.3	88.9		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	85.9	86.5		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	84.4	85.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	80.1	81.1		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	80.7	81.7		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	74.9	75.9		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		108.0	88.6			114.5	100.0			120.1	112.3

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
FC-4 / 124				FC-5 / 125			FC-6 / 126			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	107.5	81.3	70.0	110.7	84.5	80.0	115.8	93.3	
2	120.0	100.7	84.6	140.0	107.0	90.9	160.0	111.4	98.0	
3	180.0	93.0	82.1	210.0	98.8	87.9	240.0	110.7	102.1	
4	240.0	85.4	76.8	280.0	103.0	94.4	320.0	112.1	105.5	
5	300.0	82.9	76.3	350.0	98.2	91.6	400.0	105.3	100.5	
6	360.0	78.0	73.2	420.0	89.3	84.5	480.0	105.3	102.1	
7	420.0	69.6	64.8	490.0	86.3	83.1	560.0	106.1	102.9	
8	480.0	0.0	0.0	560.0	86.6	83.4	640.0	101.9	100.0	
9	540.0	0.0	0.0	630.0	81.3	79.4	720.0	98.3	97.5	
10	600.0	0.0	0.0	700.0	75.6	73.7	800.0	99.7	98.9	
11	660.0	0.0	0.0	770.0	76.0	75.2	880.0	95.1	94.3	
12	720.0	0.0	0.0	840.0	70.6	69.8	960.0	92.2	92.2	
13	780.0	0.0	0.0	910.0	65.6	65.6	1040.0	93.9	93.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	88.7	88.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	87.8	88.4	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	84.3	84.9	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	83.4	84.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	81.1	82.1	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	74.5	75.5	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	75.1	76.1	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	74.3	75.3	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	70.3	71.3	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	66.1	67.3	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		108.5	88.4		113.1	98.6		119.7	111.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
EC-1 / 130				EC-2 / 131				EC-3 / 132			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	F	SPL
1	70.0	105.3	79.1	80.0	109.1	86.6	90.0	114.8	95.7		
2	140.0	99.8	83.7	160.0	109.0	95.6	180.0	115.4	104.5		
3	210.0	97.3	86.4	240.0	108.2	99.6	270.0	117.0	108.4		
4	280.0	92.7	84.1	320.0	105.8	99.2	360.0	117.3	112.5		
5	350.0	88.9	82.3	400.0	104.6	99.8	450.0	115.9	112.7		
6	420.0	86.6	81.8	480.0	99.9	96.7	540.0	114.8	111.6		
7	490.0	80.1	76.9	560.0	97.1	93.9	630.0	115.4	113.5		
8	560.0	74.1	70.9	640.0	96.2	94.3	720.0	114.2	113.4		
9	630.0	71.1	69.2	720.0	94.0	93.2	810.0	113.8	113.0		
10	700.0	70.1	68.2	800.0	92.1	91.3	900.0	114.2	114.2		
11	770.0	67.2	66.4	880.0	88.8	88.0	990.0	112.9	112.9		
12	840.0	63.1	62.3	960.0	86.9	86.9	1080.0	110.5	110.5		
13	910.0	57.1	57.1	1040.0	84.9	84.9	1170.0	107.8	108.4		
14	980.0	0.0	0.0	1120.0	79.6	79.6	1260.0	106.6	107.2		
15	1050.0	0.0	0.0	1200.0	75.7	76.3	1350.0	105.8	106.4		
16	1120.0	0.0	0.0	1280.0	73.6	74.2	1440.0	103.4	104.4		
17	1190.0	0.0	0.0	1360.0	71.4	72.0	1530.0	103.9	104.9		
18	1260.0	0.0	0.0	1440.0	69.0	70.0	1620.0	102.9	103.9		
19	1330.0	0.0	0.0	1520.0	65.7	66.7	1710.0	99.7	100.7		
20	1400.0	0.0	0.0	1600.0	62.5	63.5	1800.0	99.6	100.8		
21	1470.0	0.0	0.0	1680.0	58.7	59.7	1890.0	98.6	99.8		
22	1540.0	0.0	0.0	1760.0	52.7	53.7	1980.0	96.0	97.2		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	93.2	94.4		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	94.1	95.3		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	94.7	96.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	92.4	93.7		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	93.0	94.3		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	94.1	95.4		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	92.3	93.6		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	89.4	90.7		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	89.7	91.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	91.0	92.2		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	89.3	90.5		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	88.7	89.9		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	89.9	91.1		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	86.1	87.3		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	84.0	85.2		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	84.9	86.1		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	85.4	86.6		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	84.0	85.0		
OASPL		107.2	91.5			115.0	106.6			126.1	123.3

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
EC-1 / 130				EC-2 / 131				EC-3 / 132		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.5	82.3	80.0	112.2	89.7	90.0	116.7	97.6	
2	140.0	104.4	88.3	160.0	112.7	99.3	180.0	121.9	111.0	
3	210.0	102.0	91.1	240.0	110.7	102.1	270.0	121.3	112.7	
4	280.0	98.1	89.5	320.0	107.7	101.1	360.0	118.2	113.4	
5	350.0	93.4	86.8	400.0	107.8	103.0	450.0	121.9	118.7	
6	420.0	92.2	87.4	480.0	107.7	104.5	540.0	122.9	119.7	
7	490.0	89.7	86.5	560.0	104.5	101.3	630.0	119.5	117.6	
8	560.0	85.4	82.2	640.0	102.1	100.2	720.0	119.3	118.5	
9	630.0	79.9	78.0	720.0	100.1	99.3	810.0	119.4	118.6	
10	700.0	75.9	74.0	800.0	99.8	99.0	900.0	120.4	120.4	
11	770.0	75.2	74.4	880.0	98.4	97.6	990.0	117.5	117.5	
12	840.0	72.2	71.4	960.0	95.3	95.3	1080.0	117.0	117.0	
13	910.0	65.8	65.8	1040.0	92.3	92.3	1170.0	117.1	117.7	
14	980.0	62.2	62.2	1120.0	91.1	91.1	1260.0	115.9	116.5	
15	1050.0	60.8	60.8	1200.0	88.8	89.4	1350.0	114.5	115.1	
16	1120.0	0.0	0.0	1280.0	85.6	86.2	1440.0	112.9	113.9	
17	1190.0	0.0	0.0	1360.0	83.8	84.4	1530.0	112.2	113.2	
18	1260.0	0.0	0.0	1440.0	81.5	82.5	1620.0	110.8	111.8	
19	1330.0	0.0	0.0	1520.0	79.6	80.6	1710.0	109.3	110.3	
20	1400.0	0.0	0.0	1600.0	76.5	77.5	1800.0	108.1	109.3	
21	1470.0	0.0	0.0	1680.0	72.9	73.9	1890.0	107.2	108.4	
22	1540.0	0.0	0.0	1760.0	71.0	72.0	1980.0	107.8	109.0	
23	1610.0	0.0	0.0	1840.0	68.5	69.7	2070.0	106.6	107.8	
24	1680.0	0.0	0.0	1920.0	65.1	66.3	2160.0	106.5	107.7	
25	1750.0	0.0	0.0	2000.0	62.4	63.6	2250.0	106.7	108.0	
26	1820.0	0.0	0.0	2080.0	58.6	59.8	2340.0	106.7	108.0	
27	1890.0	0.0	0.0	2160.0	57.6	58.8	2430.0	106.6	107.9	
28	1960.0	0.0	0.0	2240.0	56.6	57.9	2520.0	106.5	107.8	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	107.0	108.3	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	106.5	107.8	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	105.5	106.8	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	104.7	105.9	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	104.9	106.1	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	105.3	106.5	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	104.1	105.3	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	102.7	103.9	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	102.8	104.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	102.7	103.9	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	101.6	102.8	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	100.6	101.6	
OASPL		111.0	96.8	118.6		111.5	131.7		129.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MF 3 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
EC-1 / 130				EC-2 / 131				EC-3 / 132			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	110.1	83.9	80.0	115.0	92.5	90.0	117.5	98.4		
2	140.0	106.1	90.0	160.0	113.4	100.0	180.0	119.1	108.2		
3	210.0	102.3	91.4	240.0	112.5	103.9	270.0	117.6	109.0		
4	280.0	99.0	90.4	320.0	110.1	103.5	360.0	120.3	115.5		
5	350.0	95.9	89.3	400.0	110.6	105.8	450.0	121.0	117.8		
6	420.0	94.2	89.4	480.0	107.6	104.4	540.0	117.9	114.7		
7	490.0	89.3	86.1	560.0	103.5	100.3	630.0	120.0	118.1		
8	560.0	84.6	81.4	640.0	104.2	102.3	720.0	120.7	119.9		
9	630.0	82.7	80.8	720.0	102.6	101.8	810.0	119.1	118.3		
10	700.0	78.4	76.5	800.0	100.1	99.3	900.0	119.0	119.0		
11	770.0	75.2	74.4	880.0	98.0	97.2	990.0	119.3	119.3		
12	840.0	72.1	71.3	960.0	97.4	97.4	1080.0	117.3	117.3		
13	910.0	67.1	67.1	1040.0	94.8	94.8	1170.0	114.8	115.4		
14	980.0	61.7	61.7	1120.0	91.1	91.1	1260.0	116.5	117.1		
15	1050.0	0.0	0.0	1200.0	89.2	89.8	1350.0	115.2	115.8		
16	1120.0	0.0	0.0	1280.0	89.0	89.6	1440.0	112.4	113.4		
17	1190.0	0.0	0.0	1360.0	85.5	86.1	1530.0	111.8	112.8		
18	1260.0	0.0	0.0	1440.0	81.2	82.2	1620.0	112.4	113.4		
19	1330.0	0.0	0.0	1520.0	79.3	80.3	1710.0	109.6	110.6		
20	1400.0	0.0	0.0	1600.0	78.0	79.0	1800.0	106.6	107.8		
21	1470.0	0.0	0.0	1680.0	74.6	75.6	1890.0	106.8	108.0		
22	1540.0	0.0	0.0	1760.0	68.9	69.9	1980.0	106.9	108.1		
23	1610.0	0.0	0.0	1840.0	66.5	67.7	2070.0	104.8	106.0		
24	1680.0	0.0	0.0	1920.0	66.6	67.8	2160.0	105.3	106.5		
25	1750.0	0.0	0.0	2000.0	62.5	63.7	2250.0	107.5	108.8		
26	1820.0	0.0	0.0	2080.0	62.8	64.0	2340.0	106.7	108.0		
27	1890.0	0.0	0.0	2160.0	62.6	63.8	2430.0	105.6	106.9		
28	1960.0	0.0	0.0	2240.0	61.8	63.1	2520.0	107.4	108.7		
29	2030.0	0.0	0.0	2320.0	59.9	61.2	2610.0	107.9	109.2		
30	2100.0	0.0	0.0	2400.0	55.5	56.8	2700.0	106.9	108.2		
31	2170.0	0.0	0.0	2480.0	51.6	52.9	2790.0	106.0	107.3		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	106.5	107.7		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	106.1	107.3		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	104.4	105.6		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	100.9	102.1		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	100.9	102.1		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	102.7	103.9		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	101.5	102.7		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	99.0	100.2		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	100.6	101.6		
OASPL		112.4	97.9			120.4	112.9			131.0	129.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
EC-1 / 130				EC-2 / 131				EC-3 / 132		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	111.4	85.2	80.0	117.7	95.2	90.0	119.1	100.0	
2	140.0	107.1	91.0	160.0	113.2	99.8	180.0	117.8	106.9	
3	210.0	102.0	91.1	240.0	113.4	104.8	270.0	119.5	110.9	
4	280.0	101.0	92.4	320.0	111.1	104.5	360.0	118.8	114.0	
5	350.0	95.2	88.6	400.0	108.3	103.5	450.0	119.8	116.6	
6	420.0	92.1	87.3	480.0	106.8	103.6	540.0	117.8	114.6	
7	490.0	88.3	85.1	560.0	104.9	101.7	630.0	119.7	117.8	
8	560.0	84.7	81.5	640.0	102.6	101.7	720.0	118.4	117.6	
9	630.0	81.2	79.3	720.0	100.1	99.3	810.0	117.4	116.6	
10	700.0	76.9	75.0	800.0	98.7	97.9	900.0	118.1	118.1	
11	770.0	71.9	71.1	880.0	97.3	96.5	990.0	116.1	116.1	
12	840.0	66.8	66.0	960.0	93.3	93.3	1080.0	115.2	115.2	
13	910.0	0.0	0.0	1040.0	92.3	92.3	1170.0	115.0	115.6	
14	980.0	0.0	0.0	1120.0	90.8	90.8	1260.0	112.0	112.6	
15	1050.0	0.0	0.0	1200.0	87.2	87.8	1350.0	111.6	112.2	
16	1120.0	0.0	0.0	1280.0	82.8	83.4	1440.0	110.5	111.5	
17	1190.0	0.0	0.0	1360.0	82.8	83.4	1530.0	108.1	109.1	
18	1260.0	0.0	0.0	1440.0	80.2	81.2	1620.0	105.6	106.6	
19	1330.0	0.0	0.0	1520.0	76.6	77.6	1710.0	106.6	107.6	
20	1400.0	0.0	0.0	1600.0	72.0	73.0	1800.0	104.9	106.1	
21	1470.0	0.0	0.0	1680.0	69.8	70.8	1890.0	101.3	102.5	
22	1540.0	0.0	0.0	1760.0	68.9	69.9	1980.0	102.8	104.0	
23	1610.0	0.0	0.0	1840.0	65.1	66.3	2070.0	102.9	104.1	
24	1680.0	0.0	0.0	1920.0	60.4	61.6	2160.0	100.4	101.6	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	102.8	104.1	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	101.5	102.8	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	101.7	103.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	102.8	104.1	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	102.7	104.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	102.0	103.3	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	101.0	102.3	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	100.7	101.9	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	99.2	100.4	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	97.3	98.5	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	98.6	99.8	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	97.7	98.9	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	94.7	95.9	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	95.9	97.1	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	94.9	96.1	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	92.9	95.9	
GASPL		113.5	98.1	121.3		112.5	129.7		127.5	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
EC-1 / 130				EC-2 / 131				EC-3 / 132		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	112.6	86.4	80.0	119.6	97.1	90.0	120.1	101.0	
2	140.0	108.1	92.0	160.0	114.0	100.6	180.0	117.0	106.1	
3	210.0	99.6	88.7	240.0	111.1	102.5	270.0	119.5	110.9	
4	280.0	99.5	90.9	320.0	113.8	107.2	360.0	122.8	118.0	
5	350.0	97.0	90.4	400.0	109.0	104.2	450.0	114.1	110.9	
6	420.0	89.5	84.7	480.0	102.6	99.4	540.0	117.3	114.1	
7	490.0	82.6	79.4	560.0	103.9	100.7	630.0	117.5	115.6	
8	560.0	82.3	79.1	640.0	101.5	99.6	720.0	113.6	112.8	
9	630.0	77.6	75.7	720.0	96.8	96.0	810.0	113.4	112.6	
10	700.0	69.8	67.9	800.0	93.4	92.6	900.0	113.3	113.3	
11	770.0	67.1	66.3	880.0	92.6	91.8	990.0	111.8	111.8	
12	840.0	59.2	58.4	960.0	91.4	91.4	1080.0	110.4	110.4	
13	910.0	0.0	0.0	1040.0	88.1	88.1	1170.0	108.6	109.2	
14	980.0	0.0	0.0	1120.0	84.7	84.7	1260.0	108.4	109.0	
15	1050.0	0.0	0.0	1200.0	81.5	82.1	1350.0	105.9	106.5	
16	1120.0	0.0	0.0	1280.0	80.8	81.4	1440.0	103.7	104.7	
17	1190.0	0.0	0.0	1360.0	73.1	73.7	1530.0	102.7	103.7	
18	1260.0	0.0	0.0	1440.0	70.9	71.9	1620.0	100.1	101.1	
19	1330.0	0.0	0.0	1520.0	69.7	70.7	1710.0	96.2	97.2	
20	1400.0	0.0	0.0	1600.0	66.4	67.4	1800.0	98.1	99.3	
21	1470.0	0.0	0.0	1680.0	61.1	62.1	1890.0	94.3	95.5	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	93.2	94.4	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	96.3	97.5	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	94.7	95.9	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	91.9	93.2	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	94.5	95.8	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	87.8	89.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	93.9	95.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	86.6	87.9	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	88.5	89.8	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	91.7	93.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	82.9	84.1	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	88.1	89.3	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	88.6	89.8	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	80.0	81.2	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	86.0	87.2	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	83.4	84.6	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	69.2	70.4	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		114.3	97.5	122.2		111.8	128.4		124.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN									
EC-1 / 130			EC-2 / 131			EC-3 / 132			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	70.0	112.8	86.6	80.0	119.7	97.2	90.0	120.4	101.3
2	140.0	106.4	90.3	160.0	112.7	99.3	180.0	117.0	106.1
3	210.0	97.0	86.1	240.0	109.1	100.5	270.0	118.2	109.6
4	280.0	96.3	87.7	320.0	109.6	103.0	360.0	116.0	111.2
5	350.0	90.1	83.5	400.0	100.6	95.8	450.0	106.1	102.9
6	420.0	80.4	75.6	480.0	95.7	92.5	540.0	113.7	110.5
7	490.0	77.3	74.1	560.0	98.6	95.4	630.0	108.2	106.3
8	560.0	76.3	73.1	640.0	92.1	90.2	720.0	102.8	102.0
9	630.0	64.3	62.4	720.0	72.8	72.0	810.0	108.7	107.9
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	100.7	100.7
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	96.1	96.1
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	99.7	99.7
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	91.5	92.1
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	85.4	86.0
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	89.4	90.0
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	82.2	83.2
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	73.1	74.1
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0
OASPL		113.9	94.5			121.2	107.4		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
EC-1 / 130				EC-2 / 131				EC-3 / 132			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	110.0	83.8	80.0	115.2	92.7	90.0	119.4	100.3		
2	140.0	97.0	80.9	160.0	105.5	92.1	180.0	117.1	106.2		
3	210.0	85.2	74.3	240.0	102.5	93.9	270.0	108.1	99.5		
4	280.0	79.2	70.6	320.0	93.0	86.4	360.0	107.0	102.2		
5	350.0	79.5	72.9	400.0	83.9	79.1	450.0	93.7	90.5		
6	420.0	59.7	54.9	480.0	78.9	75.7	540.0	0.0	0.0		
7	490.0	0.0	0.0	560.0	76.8	73.6	630.0	0.0	0.0		
8	560.0	0.0	0.0	640.0	79.7	77.8	720.0	0.0	0.0		
9	630.0	0.0	0.0	720.0	69.4	68.6	810.0	0.0	0.0		
10	700.0	0.0	0.0	800.0	71.3	70.5	900.0	0.0	0.0		
11	770.0	0.0	0.0	880.0	72.0	71.2	990.0	0.0	0.0		
12	840.0	0.0	0.0	960.0	65.4	65.4	1080.0	0.0	0.0		
13	910.0	0.0	0.0	1040.0	67.0	67.0	1170.0	0.0	0.0		
14	980.0	0.0	0.0	1120.0	61.3	61.3	1260.0	0.0	0.0		
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0		
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0		
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0		
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		110.3	86.3	115.8		98.2	121.7		109.0		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
EC-1 / 130				EC-2 / 131			EC-3 / 132			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.6	82.4	80.0	115.3	92.8	90.0	114.1	95.0	
2	140.0	107.0	90.9	160.0	112.3	98.9	180.0	117.3	106.4	
3	210.0	102.5	91.6	240.0	112.3	103.7	270.0	117.7	109.1	
4	280.0	99.3	90.7	320.0	110.3	103.7	360.0	118.0	113.2	
5	350.0	94.8	88.2	400.0	108.0	103.2	450.0	118.0	114.8	
6	420.0	92.2	87.4	480.0	105.4	102.2	540.0	118.5	115.3	
7	490.0	88.4	85.2	560.0	103.9	100.7	630.0	118.4	116.5	
8	560.0	84.0	80.8	640.0	102.3	100.4	720.0	117.8	117.0	
9	630.0	80.1	78.2	720.0	100.7	99.9	810.0	117.7	116.9	
10	700.0	78.0	76.1	800.0	98.6	97.8	900.0	115.9	115.9	
11	770.0	74.0	73.2	880.0	95.8	95.0	990.0	115.5	115.5	
12	840.0	69.7	68.9	960.0	93.8	93.8	1080.0	114.2	114.2	
13	910.0	64.6	64.6	1040.0	91.5	91.5	1170.0	113.1	113.7	
14	980.0	0.0	0.0	1120.0	89.7	89.7	1260.0	111.5	112.1	
15	1050.0	0.0	0.0	1200.0	86.8	87.4	1350.0	110.5	111.1	
16	1120.0	0.0	0.0	1280.0	84.6	85.2	1440.0	108.6	109.6	
17	1190.0	0.0	0.0	1360.0	82.4	83.0	1530.0	106.8	107.8	
18	1260.0	0.0	0.0	1440.0	79.7	80.7	1620.0	105.5	106.5	
19	1330.0	0.0	0.0	1520.0	76.3	77.3	1710.0	103.0	104.0	
20	1400.0	0.0	0.0	1600.0	73.5	74.5	1800.0	102.2	103.4	
21	1470.0	0.0	0.0	1680.0	70.4	71.4	1890.0	101.2	102.4	
22	1540.0	0.0	0.0	1760.0	67.7	68.7	1980.0	100.1	101.3	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	100.6	101.8	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	99.7	100.9	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	99.5	100.8	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	100.0	101.3	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	99.6	100.9	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	100.2	101.5	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	99.9	101.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	100.0	101.3	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	99.2	100.5	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	99.6	100.8	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	98.3	99.5	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	97.2	98.4	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	97.1	98.3	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	95.7	96.9	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	95.0	96.2	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	94.6	95.8	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	92.4	93.6	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	92.0	93.0	
OASPL		111.9	97.6		119.8	111.5		128.5	126.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
EC-1 / 130				EC-2 / 131				EC-3 / 132		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.2	82.0	80.0	115.9	93.4	90.0	115.7	96.6	
2	140.0	105.7	89.6	160.0	110.0	96.6	180.0	113.5	102.6	
3	210.0	97.0	86.1	240.0	110.1	101.5	270.0	120.7	112.1	
4	280.0	101.0	92.4	320.0	111.6	105.0	360.0	118.1	113.3	
5	350.0	96.8	90.2	400.0	105.0	100.2	450.0	116.2	113.0	
6	420.0	86.6	81.8	480.0	104.5	101.3	540.0	119.7	116.5	
7	490.0	85.2	82.0	560.0	105.6	102.4	630.0	115.9	114.0	
8	560.0	84.9	81.7	640.0	101.2	99.3	720.0	116.8	116.0	
9	630.0	81.0	79.1	720.0	96.8	96.0	810.0	118.0	117.2	
10	700.0	74.9	73.0	800.0	98.9	98.1	900.0	112.6	112.6	
11	770.0	0.0	0.0	880.0	94.2	93.4	990.0	114.6	114.6	
12	840.0	0.0	0.0	960.0	89.6	89.6	1080.0	114.5	114.5	
13	910.0	0.0	0.0	1040.0	92.3	92.3	1170.0	112.5	113.1	
14	980.0	0.0	0.0	1120.0	87.5	87.5	1260.0	110.4	111.0	
15	1050.0	0.0	0.0	1200.0	87.2	87.8	1350.0	111.7	112.3	
16	1120.0	0.0	0.0	1280.0	82.9	83.5	1440.0	109.2	110.2	
17	1190.0	0.0	0.0	1360.0	80.4	81.0	1530.0	106.1	107.1	
18	1260.0	0.0	0.0	1440.0	79.3	80.3	1620.0	107.9	108.9	
19	1330.0	0.0	0.0	1520.0	75.7	76.7	1710.0	104.7	105.7	
20	1400.0	0.0	0.0	1600.0	73.4	74.4	1800.0	103.9	105.1	
21	1470.0	0.0	0.0	1680.0	71.9	72.9	1890.0	104.6	105.8	
22	1540.0	0.0	0.0	1760.0	68.6	69.6	1980.0	101.8	103.0	
23	1610.0	0.0	0.0	1840.0	64.7	65.9	2070.0	103.9	105.1	
24	1680.0	0.0	0.0	1920.0	61.4	62.6	2160.0	105.4	106.6	
25	1750.0	0.0	0.0	2000.0	56.9	58.1	2250.0	97.0	98.3	
26	1820.0	0.0	0.0	2080.0	54.4	55.6	2340.0	105.3	106.6	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	102.8	104.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	100.3	101.6	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	103.6	104.9	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	100.4	101.7	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	100.8	102.1	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	101.2	102.4	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	99.3	100.5	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	99.5	100.7	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	98.7	99.9	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	99.4	100.6	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	94.5	95.7	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	98.5	99.7	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	98.1	99.3	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	90.7	91.7	
OASPL		111.1	96.8	119.4		110.8	128.4		126.2	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
EC-4 / 133				EC-5 / 134				EC-6 / 135			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	104.4	78.2	70.0	107.4	81.2	80.0	111.3	88.8		
2	120.0	95.4	79.3	140.0	100.1	84.0	160.0	110.2	96.8		
3	180.0	88.2	77.3	210.0	99.6	88.7	240.0	109.5	100.9		
4	240.0	83.3	74.7	280.0	94.3	85.7	320.0	107.7	101.1		
5	300.0	74.0	67.4	350.0	90.1	83.5	400.0	105.9	101.1		
6	360.0	71.7	66.9	420.0	88.1	83.3	480.0	102.6	99.4		
7	420.0	66.4	61.6	490.0	81.5	78.3	560.0	98.7	95.5		
8	480.0	57.4	54.2	560.0	77.5	74.3	640.0	98.6	96.7		
9	540.0	60.8	57.6	630.0	71.5	69.6	720.0	97.2	96.4		
10	600.0	54.8	52.9	700.0	67.0	65.1	800.0	93.5	92.7		
11	660.0	0.0	0.0	770.0	68.9	68.1	880.0	91.7	90.9		
12	720.0	0.0	0.0	840.0	65.0	64.2	960.0	89.8	89.8		
13	780.0	0.0	0.0	910.0	56.2	56.2	1040.0	87.2	87.2		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	83.2	83.2		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	77.1	77.7		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	76.9	77.5		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	77.3	77.9		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	73.8	74.8		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	67.6	68.6		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	67.7	68.7		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	68.3	69.3		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	63.7	64.7		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	48.8	50.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		105.1	83.9			108.9	93.1			116.7	108.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
EC-4 / 133				EC-5 / 134			EC-6 / 135			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	105.8	79.6	70.0	110.9	84.7	80.0	113.9	91.4	
2	120.0	100.7	84.6	140.0	107.0	90.9	160.0	114.7	101.3	
3	180.0	96.6	85.7	210.0	104.3	93.4	240.0	112.9	104.3	
4	240.0	89.5	80.9	280.0	100.5	91.9	320.0	110.1	103.5	
5	300.0	81.4	74.8	350.0	95.7	89.1	400.0	110.2	105.4	
6	360.0	75.2	70.4	420.0	93.5	88.7	480.0	109.5	106.3	
7	420.0	72.5	67.7	490.0	91.8	88.6	560.0	107.1	103.9	
8	480.0	71.1	67.9	560.0	87.0	83.8	640.0	104.7	102.8	
9	540.0	66.8	63.6	630.0	82.4	80.5	720.0	101.8	101.0	
10	600.0	0.0	0.0	700.0	75.7	73.8	800.0	102.3	101.5	
11	660.0	0.0	0.0	770.0	73.9	73.1	880.0	100.9	100.1	
12	720.0	0.0	0.0	840.0	73.5	72.7	960.0	98.2	98.2	
13	780.0	0.0	0.0	910.0	65.7	65.7	1040.0	95.2	95.2	
14	840.0	0.0	0.0	980.0	64.5	64.5	1120.0	93.7	93.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	92.1	92.7	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	89.9	90.5	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	87.2	87.8	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	84.4	85.4	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	82.8	83.8	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	81.3	82.3	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	77.9	78.9	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	74.9	75.9	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	72.1	73.3	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	71.3	72.5	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	71.4	72.6	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	66.0	67.2	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.5	89.7	113.4		99.0	120.7		113.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
EC-4 / 133				EC-5 / 134				EC-6 / 135			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	107.9	81.7	70.0	112.3	86.1	80.0	116.4	93.9		
2	120.0	102.0	85.9	140.0	108.7	92.6	160.0	115.2	101.8		
3	180.0	95.9	85.0	210.0	105.1	94.2	240.0	114.5	105.9		
4	240.0	90.6	82.0	280.0	102.0	93.4	320.0	112.0	105.4		
5	300.0	82.6	76.0	350.0	97.8	91.2	400.0	112.5	107.7		
6	360.0	80.9	76.1	420.0	96.3	91.5	480.0	109.7	106.5		
7	420.0	74.6	69.8	490.0	90.7	87.5	560.0	106.1	102.9		
8	480.0	65.9	62.7	560.0	86.7	83.5	640.0	106.1	104.2		
9	540.0	56.7	53.5	630.0	81.8	79.9	720.0	105.1	104.3		
10	600.0	0.0	0.0	700.0	80.9	79.0	800.0	102.6	101.8		
11	660.0	0.0	0.0	770.0	76.7	75.9	880.0	101.0	100.2		
12	720.0	0.0	0.0	840.0	74.2	73.4	960.0	99.7	99.7		
13	780.0	0.0	0.0	910.0	66.4	66.4	1040.0	97.8	97.8		
14	840.0	0.0	0.0	980.0	66.8	66.8	1120.0	93.3	93.3		
15	900.0	0.0	0.0	1050.0	62.7	62.7	1200.0	92.6	93.2		
16	960.0	0.0	0.0	1120.0	59.4	59.4	1280.0	91.7	92.3		
17	1020.0	0.0	0.0	1190.0	42.7	43.3	1360.0	88.8	89.4		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	85.3	86.3		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	83.9	84.9		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	83.9	84.9		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	82.1	83.1		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	78.1	79.1		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	76.9	78.1		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	75.4	76.6		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	73.9	75.1		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	67.9	69.1		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	64.9	66.1		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	57.5	58.8		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		109.2	90.4			114.8	100.4			122.2	115.0

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
EC-4 / 133				EC-5 / 134				EC-6 / 135		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	109.2	83.0	70.0	113.8	87.6	80.0	118.8	96.3	
2	120.0	102.9	86.8	140.0	110.0	93.9	160.0	114.9	101.5	
3	180.0	95.9	85.0	210.0	104.8	93.9	240.0	115.3	106.7	
4	240.0	90.8	82.2	280.0	104.2	95.6	320.0	113.1	106.5	
5	300.0	83.9	77.3	350.0	98.1	91.5	400.0	110.6	105.8	
6	360.0	81.0	76.2	420.0	94.1	89.3	480.0	108.8	105.6	
7	420.0	74.5	69.7	490.0	90.5	87.3	560.0	107.5	104.3	
8	480.0	67.7	64.5	560.0	86.2	83.0	640.0	106.1	104.2	
9	540.0	62.0	58.8	630.0	83.2	81.3	720.0	102.3	101.5	
10	600.0	0.0	0.0	700.0	77.1	75.2	800.0	101.2	100.4	
11	660.0	0.0	0.0	770.0	74.3	73.5	880.0	99.9	99.1	
12	720.0	0.0	0.0	840.0	70.8	70.0	960.0	96.2	96.2	
13	780.0	0.0	0.0	910.0	64.2	64.2	1040.0	95.2	95.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	93.7	93.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	90.1	90.7	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	86.1	86.7	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	85.9	86.5	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	83.2	84.2	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	80.2	81.2	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	76.6	77.6	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	74.9	75.9	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	73.9	74.9	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	71.4	72.6	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	68.3	69.5	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	65.0	66.2	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	65.8	67.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	60.6	61.8	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	60.5	61.8	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	54.1	55.4	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		110.3	91.0	116.1		100.9	122.9		114.5	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
EC-4 / 133				EC-5 / 134			EC-6 / 135			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	110.1	83.9	70.0	115.3	89.1	80.0	121.0	98.5	
2	120.0	103.9	87.8	140.0	111.1	95.0	160.0	115.9	102.5	
3	180.0	93.9	83.0	210.0	103.4	92.5	240.0	113.1	104.5	
4	240.0	86.8	78.2	280.0	102.7	94.1	320.0	116.1	109.5	
5	300.0	81.3	74.7	350.0	99.7	93.1	400.0	110.7	105.9	
6	360.0	76.1	71.3	420.0	92.2	87.4	480.0	105.1	101.9	
7	420.0	61.0	56.2	490.0	86.5	83.3	560.0	106.0	102.8	
8	480.0	63.1	59.9	560.0	85.0	81.8	640.0	103.8	101.9	
9	540.0	0.0	0.0	630.0	78.4	76.5	720.0	98.1	97.3	
10	600.0	0.0	0.0	700.0	75.0	73.1	800.0	95.9	95.1	
11	660.0	0.0	0.0	770.0	68.7	67.9	880.0	95.1	94.3	
12	720.0	0.0	0.0	840.0	62.8	62.0	960.0	93.8	93.8	
13	780.0	0.0	0.0	910.0	62.2	62.2	1040.0	90.9	90.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	86.7	86.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	85.2	85.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	83.2	83.8	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	76.5	77.1	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	75.4	76.4	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	71.9	72.9	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	69.8	70.8	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	69.4	70.4	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		111.2	90.7	117.2		100.6	123.9		113.9	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN											
EC-4 / 133				EC-5 / 134				EC-6 / 135			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	60.0	109.7	83.5	70.0	116.2	90.0	80.0	121.5	99.0		
2	120.0	102.8	86.7	140.0	109.1	93.0	160.0	114.7	101.3		
3	180.0	92.0	81.1	210.0	100.6	89.7	240.0	111.4	102.8		
4	240.0	82.9	74.3	280.0	100.4	91.8	320.0	111.8	105.2		
5	300.0	81.7	75.1	350.0	93.3	86.7	400.0	103.2	98.4		
6	360.0	74.8	70.0	420.0	79.3	74.5	480.0	97.3	94.1		
7	420.0	64.9	60.1	490.0	81.0	77.8	560.0	100.7	97.5		
8	480.0	0.0	0.0	560.0	77.8	74.6	640.0	95.1	93.2		
9	540.0	0.0	0.0	630.0	71.6	69.7	720.0	77.6	76.8		
10	600.0	0.0	0.0	700.0	62.1	60.2	800.0	89.9	89.1		
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	83.8	83.0		
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	77.5	77.5		
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	73.6	73.6		
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	69.6	69.6		
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0		
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0		
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0		
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0		
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0		
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0		
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0		
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0		
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0		
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0		
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0		
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0		
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0		
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0		
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0		
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0		
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0		
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0		
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0		
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0		
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0		
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0		
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0		
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0		
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0		
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0		
OASPL		110.6	89.5			117.2	97.8			123.1	109.6

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
EC-4 / 133				EC-5 / 134				EC-6 / 135		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	107.4	81.2	70.0	114.1	87.9	80.0	117.5	95.0	
2	120.0	93.5	77.4	140.0	100.9	84.8	160.0	106.5	93.1	
3	180.0	82.1	71.2	210.0	90.3	79.4	240.0	102.7	94.1	
4	240.0	70.7	62.1	280.0	84.7	76.1	320.0	92.8	86.2	
5	300.0	62.3	55.7	350.0	82.1	75.5	400.0	87.9	83.1	
6	360.0	0.0	0.0	420.0	73.5	68.7	480.0	77.8	74.6	
7	420.0	0.0	0.0	490.0	71.5	68.3	560.0	0.0	0.0	
8	480.0	0.0	0.0	560.0	61.8	58.6	640.0	0.0	0.0	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	0.0	0.0	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.6	83.0	114.3		90.4	118.0		99.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
EC-4 / 133				EC-5 / 134			EC-6 / 135			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	108.4	82.2	70.0	112.4	86.2	80.0	116.5	94.0	
2	120.0	101.7	85.6	140.0	110.5	94.4	160.0	114.4	101.0	
3	180.0	94.1	83.2	210.0	106.5	95.6	240.0	114.3	105.7	
4	240.0	89.6	81.0	280.0	103.1	94.5	320.0	112.1	105.5	
5	300.0	84.1	77.5	350.0	97.4	90.8	400.0	109.9	105.1	
6	360.0	74.1	69.3	420.0	94.5	89.7	480.0	107.8	104.6	
7	420.0	0.0	0.0	490.0	91.7	88.5	560.0	105.9	102.7	
8	480.0	0.0	0.0	560.0	87.2	84.0	640.0	104.4	102.5	
9	540.0	0.0	0.0	630.0	82.2	80.3	720.0	102.9	102.1	
10	600.0	0.0	0.0	700.0	79.0	77.1	800.0	101.1	100.3	
11	660.0	0.0	0.0	770.0	78.4	77.6	880.0	98.4	97.6	
12	720.0	0.0	0.0	840.0	72.8	72.0	960.0	96.4	96.4	
13	780.0	0.0	0.0	910.0	67.3	67.3	1040.0	94.4	94.4	
14	840.0	0.0	0.0	980.0	63.4	63.4	1120.0	91.9	91.9	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	89.6	90.2	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	87.5	88.1	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	84.4	85.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	83.1	84.1	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	79.2	80.2	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	77.6	78.6	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	71.2	72.2	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		109.4	89.7	115.6		101.1	121.5		113.6	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 24.4 DEG)

DATA-POINT / RUN										
EC-4 / 133				EC-5 / 134				EC-6 / 135		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	108.5	82.3	70.0	112.1	85.9	80.0	117.9	95.4	
2	120.0	102.4	86.3	140.0	108.0	91.9	160.0	112.9	99.5	
3	180.0	93.2	82.3	210.0	99.3	88.4	240.0	112.2	103.6	
4	240.0	82.7	74.1	280.0	104.0	95.4	320.0	113.5	106.9	
5	300.0	84.2	77.6	350.0	99.2	92.6	400.0	106.4	101.6	
6	360.0	78.4	73.6	420.0	90.6	85.8	480.0	106.4	103.2	
7	420.0	69.8	65.0	490.0	87.8	84.6	560.0	107.2	104.0	
8	480.0	62.2	59.0	560.0	88.2	85.0	640.0	102.5	100.6	
9	540.0	0.0	0.0	630.0	82.2	80.3	720.0	99.8	99.0	
10	600.0	0.0	0.0	700.0	74.2	72.3	800.0	101.1	100.3	
11	660.0	0.0	0.0	770.0	72.8	72.0	880.0	95.9	95.1	
12	720.0	0.0	0.0	840.0	71.5	70.7	960.0	92.8	92.8	
13	780.0	0.0	0.0	910.0	69.7	69.7	1040.0	94.9	94.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	91.0	91.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	88.7	89.3	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	84.1	84.7	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	85.0	85.6	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	82.5	83.5	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	77.1	78.1	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	76.4	77.4	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	75.9	76.9	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	71.2	72.2	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		109.6	89.4	114.3		99.6	121.4		112.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

7. Comments on Data Interpretation

In the preceeding chapters acoustic as-measured data are presented in terms of pressure-time histories and narrow-band spectra for all microphone positions MP 1 to MP 9*.

As stated in the "Executive Report" to this Appendix all data have been analysed regardless of occasional microphone drop-outs or the occurrence of external pressure disturbances which may distort the propeller noise-signature completely.

To avoid erroneous data interpretation, the following list summarizes all those data-points (within the total test-program) which should be deleted with respect to the microphone position indicated:

Microphone Position MP 3:

Delete analyses of Data Points BC-4
 BC-5.

Microphone Position MP 6:

Subprogram	Delete analyses of Data Points
Basic Program	AN-1,2,3,4,5,7; BN-1,2,3,4,5,6,61,7 BC-1,2,3,4,5,6,61,7
Temperature Effect	HN-3; IN-1,2,3; JN-1,2,3; KN-1,2 HC-1,2; IC-1,2,3;
Attitude Effect	-
Installation Effect	FNC-7,8,9,10,11,12

* MP 8 has only been analysed for data points within the "Attitude-effect" test-program.

In addition, noise data acquired at microphone position MP 7 should be interpreted with care for such data-points which combine low propeller rotational speeds with high tunnel flow-velocities. Respective data are often disturbed due to the effects of microphone vibration. In each of these cases the respective averaged pressure-time history and the corresponding level-spectrum should be inspected carefully. If both data representations do not exhibit any periodic behaviour the respective analysis should not be interpreted.

On top of the averaged pressure-time history plot the number of averages as well as the magnitude of "disturbance-pressure-amplitudes" (which have been detected and deleted within the analysed time-interval) are indicated, the latter by ΔP . In case of completely distorted propeller noise signatures, ΔP generally assumes values of 496% (referenced to the minimum peak-to-peak pressure amplitude within the total number of propeller revolutions analysed). If even higher disturbance amplitudes occur, respective data analyses are marked by $\Delta P > ***$ and should be deleted. Lists of harmonic levels in this case often contain just one level-value for the fundamental frequency (HN=1) which then however has no physical meaning.

Therefore, data interpretation should not be solely based on the listing of harmonic levels. In particular, if only one harmonic level at HN=1 is listed, a careful inspection of the respective level-spectrum (as calculated from the averaged time-history) is necessary to ensure the physical relevance of this harmonic level.

END

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